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# PENNSYLVANIA GAME NEWS

JANUARY, 1959

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# THE STORY BEHIND THE COVER

**G**UIDED missiles, rockets and satellites may be new under the sun as viewed with human eyes but in Nature, the bird portrayed on this first GAME NEWS cover for 1959 holds the record in guided flight. It was known long before gunpowder or liquid oxygen were

discovered that no other feathered comet could equal the Duck Hawk.

In days of yore, no man of lower birth than an earl was permitted to keep this hawk, now called the Duck Hawk in the New World, but then much more appropriately named the Peregrine falcon. For centuries, it was THE bird in that type of hunting which takes its name from the bird itself—falconry. This ancient sport, the art of which is almost lost in these modern times, was truly the sport of kings. The challenge presented in taming, training and flying the most spirited and courageous birds alive was beyond compare. But civilization seems to have marched on and mankind now relies on mechanical means and artificial ruses to make his kills. Falconry is practiced by a few persons in America but due to the protection given almost all native birds, it is increasingly difficult to fly trained falcons without having them killing illegal prey.

Still, the Duck Hawk lingers on—a rare resident or visitor to our Commonwealth and certainly a scarce bird in any part of the country. Here is a bird which usually will have no part of civilization. It nests only on remote mountain cliffs, ranges over wilderness rivers, lakes and valleys, and fears not. It is the most powerful flier of them all, can easily overtake the Chimney Swift, and has actually been clocked at over 175 miles per hour in a power dive.

The Duck Hawk lives on small birds of all kinds but also feeds extensively on the larger species such as crows, flickers, kingfishers, bluejays (a favorite prey), ducks, grouse and pheasants. It never attacks, however, except to feed and it never leaves a cripple. This feathered thunderbolt kills quickly but it always kills clean. It may start its power dive from a great height and stun its quarry with one quick blow of clenched claws; otherwise it outraces the prey and snatches it from mid-air with powerful, sharp talons which spell instant death.

Surely every human hunter should be able to admire this hawk which is protected by law in Pennsylvania. Armed only with wings and talons, it needs not hide in blinds nor resort to decoys; nether does it call nor flush its prey. The Duck Hawk, in the final analysis, kills in an honorable way but it must kill to live. In the New Year, even as through the centuries, the sight of this rare falcon speeding through the heavens is a rare thrill for any earth-bound creature.



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## PENNSYLVANIA GAME NEWS

Will Johns .....Editor  
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JANUARY, 1959

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**Editorial . . .****BY YOUR DEEDS**

**N**EW Years usually start with good intentions. It has become traditional to review accomplishments of bygone days, to study the mistakes or the shortcomings, and to resolve improvements for the months ahead.

For many sportsmen, the end of the old and the start of the new will center about such things as more target practice with gun or bow, additional days of training the favorite dog, exploring new hunting territory, repainting decoys and boats, plus all the other things that should and must be done to make hunting better in the New Year than it was in the Old.

But the key to hunting's future increasingly depends less on the methods, techniques and equipment used as it does on the manner in which the sport is pursued. The finest shotgun, rifle or bow—the best bird dog or rabbit hound—and the greatest skill in using them will be of no avail if the opportunity for their use is not present.

Thus our prospects for outdoor sport in this and all the new years to come hinge on what the Pennsylvania Forestry Association has classified as "outdoor good manners." For in the months ahead, each of us individually must help insure hunting opportunity for all. We no longer can count on that "other fellow" to do it for us. It is what we do, as individuals, that will determine where and when we can pursue our favorite pastime.

It takes but a single case of disrespect to cause a farm to be posted. Hunting accidents are not caused by groups; rather they result from individual carelessness. A single match or burning cigarette butt starts a forest fire. Some single person or family leaves a campsite looking like a trash or garbage dump.

The best cure for any disease is prevention. The best way to eliminate an evil is to counteract it with good. Good outdoor manners will not automatically become standard procedure for everyone through the writing of a set of rules or a code of conduct.

On the contrary, acceptable human behavior results when enough people perform in such a way that it becomes a standard. Anyone not measuring up to that standard is then ostracized and ridiculed. Lack of acceptance is far greater punishment than physical pain.

This year, and in all the years to come, we must give added effort to setting the good example. More and more we must ask permission first, make sure our campfires are dead out, handle our guns or bows safely, clean up our litter, and do all the other things that typify good outdoor manners. For by our deeds, others will know us. And if more and more sportsmen resolve to become leaders, less and less others will follow poor examples. Respect, courtesy, and consideration will become contagious. In time, the horizons for outdoor sport and recreation will once more brighten with each "Happy New Year."







# Haunted Hunting Grounds

## Venango County

By Don Neal

**G**HOSTS are ghosts. And I'd be the last person on this earth to welcome the sight of one of the white phantoms on a bleak, black night somewhere around the stroke of midnight. Especially if this particular phantom made it a point to meet up with me at any of the lonelier spots of my favorite hunting grounds. Boy! That would be something. And yet, during the bright sunlit hours of daytime, I'm the very fellow who will spend as much of his field time hunting ghosts as he does hunting game. In fact, sometimes more.

Crazy? Maybe so. Yet there's nothing I like more, when I'm rambling over fields and through the forests, than to get acquainted with the ghosts that inhabit the area where



I'm hunting. Speaking from experience, it's great sport. And furthermore, if you don't do this sort of thing—if you don't get to know about the far-famed old buzzards who once tramped the grounds you cover in your hunting trips—you're missing half the fun of the trip and all the joy of knowing some of the greatest guys who ever drew a breath.

I've met scads of these old boys. All the way from Phil Tome who hunted elk on the headwaters of the Allegheny river when you needed the unquestionable friendship of Chief Cornplanter of the Senecas to do it, to Ben Hogan of the early oil field days who bragged he was the "meanest man in the world" and did everything within the scope of his miserable cunningness to prove it. Phil was a good guy, but only one of the many quiet, secretive mountain men who tramped the wilderness of the Allegheny at the time. If he hadn't left behind a full and complete diary of his hunting experiences, it is doubtful he would have been remembered. Ben Hogan, though, was different. This man, who was bigger than a bull and twice as treacherous, according to legend, couldn't write a word, but he raised such a ruckus throughout the early oil fields that everybody who could write found they had an awful lot to say about him. And because I have an affinity for the wild, boisterous type of has-been I'd like to illustrate my point of "ghost hunting" by telling you about Ben.

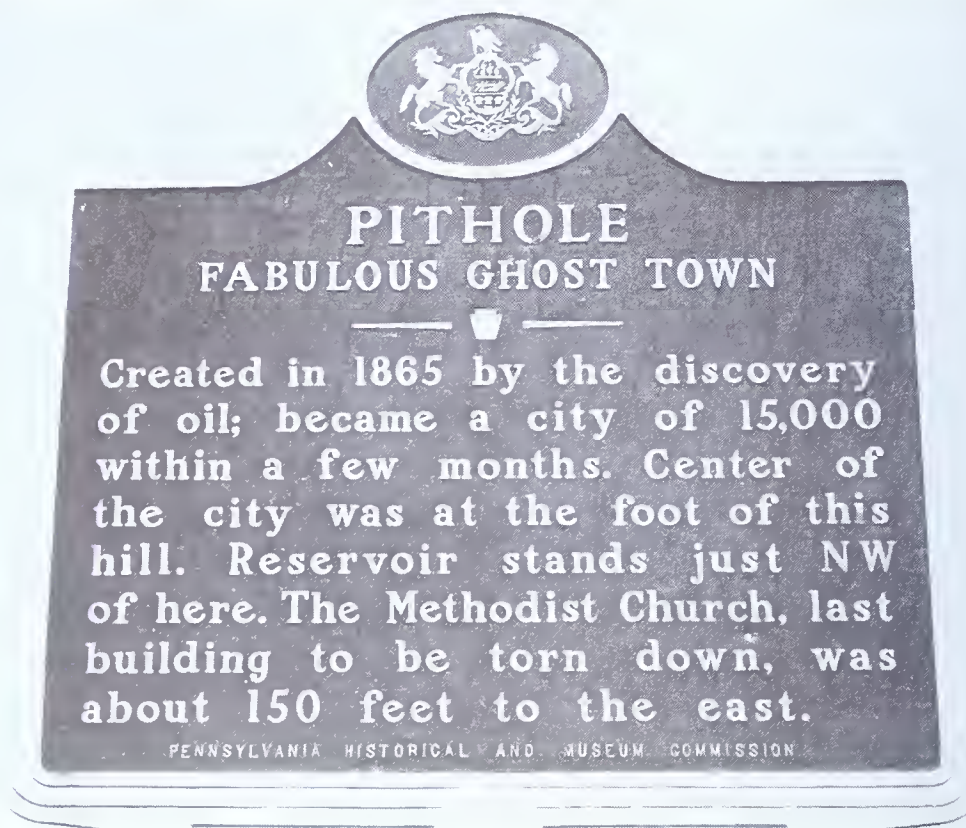
The Civil War had just ended when Ben Hogan wandered into Pithole City and liked the looks of the booming oil town. He was grateful to be here, or anywhere. For he had just escaped death on the gallows after being convicted of treason and it was only by the signature of President Abraham Lincoln that he had been able to come to the oil fields. And he had a purpose in coming. For at the time, throughout all of the world, Pithole City was being heralded as the place where oil, black

gold, flowed freely from the ground and fortunes were to be had for the asking. As a result, millions of war-profit dollars were being poured into this backwoods community to develop its wealth potential. Reputedly, and in fact, it was the richest, the toughest, and the most lawless of any of the new boom towns that were springing up wherever wildcat drilling operations brought in a new field. To a man of Hogan's make-up this was a Utopia, for he had an intention to establish a combination brothel and gambling hall to relieve the lucky drillers of their new-found wealth.

At the time Ben Hogan wandered into Pithole City it was a town of nineteen thousand population and another twenty-five thousand lived in the clustered groups of shanties on the hills surrounding it. Only six months before, in December of 1864, this had been the farm of Thomas Holmden and as such consisted of a run-down house, a barn and some out-buildings. Now, the rocky fields that had refused to grow crops for Holmden were filled with the hastily constructed buildings of Pithole City, or were alive with the drilling rigs of the prospectors. Everywhere, either on the streets of the town or among the oil derricks, people swarmed like angry bees as they fought to grab their share of the black gold fortunes that came gushing from the ground.

Land values were fabulous. The farm that Thomas Holmden would have sold for \$500 in the fall of 1864 brought him \$1,300,000 the following July. The men who bought it then, sold out in September for a flat \$2,000,000. Quarter-acre leases on this land brought any where from two to sixteen thousand dollars per lease depending on how close they were to big wells which were flowing twelve to fifteen hundred barrels of oil a day.

But if it took money to buy the Pithole land, the men of Pithole had it.



PENNSYLVANIA GHOST TOWN is marked today by this plaque erected by the Pennsylvania Historical and Museum Commission. Created in 1865, its population grew to over 15,000 persons in a period of six months.

Men from every corner of the globe slept in field beds with thousands of dollars buttoned in their shirt pockets or strapped around their middles in fat money belts that cut into their sides as they lay on the straw covered floors. On the streets of Pithole it was easy to point to a man who had come to town with a half-million dollars and didn't have a dime of it, or to point to a man who had come without a dime and now had a million. Carpenters were being paid thirty dollars a day to build the saloons and gambling parlors, and fifteen hundred teamsters, who were making more money in one day than they ever had made in a week before, were employed at hauling the oil to the rail sidings nine miles away.

This was, without a doubt, Ben Hogan's Utopia. Less than a month from the time he had come wander-

ing into Pithole City he had bought a finished building and established a gambling saloon. Two weeks later, French Katie, his mistress, arrived with the girls and the first of his Pithole operations was in full swing. Whether he had, as it was rumored, financed the operation by pulling a wealthy land speculator off into a dark alley and robbing him of his money belt, is not actually known; nor will it ever be known. But it is known, and established by fact, that such an operation was well within the limits of Hogan's talents.

From the very beginning Hogan prospered in Pithole City. Not too long after the opening of his first establishment he was able to open his second, and soon after that a third was collecting its share of the town's easy money. This success, coupled with the fact that French Katie was

an able manager of his affairs, left Hogan with time on his hands and he grew restless.

The outcome of this restlessness, considering his bullish nature, was a natural consequence. Prior to the war Ben Hogan had been a prize fighter in New York City and ever since coming to Pithole it had been his brag that when he left the metropolis to run Confederate guns through the Union blockade he had been undefeated and was, therefore, the world's champion. To date, the few residents of Pithole who had taken on enough Monongahela Rye to question his right to the title had found that he was, to their complete satisfaction, the rightful claimant to the crown. They did, however, wonder if there wasn't someone, somewhere, who could upset Hogan. They scoured the oil fields and brought in paid fighters from Buffalo, Cleveland, and Pittsburgh. But Hogan dispatched these challengers, one after the other, without the least bit of trouble and was so efficient about it that when a group of Pithole sportsmen brought Bill King, the Wild Bull of the West, up from St. Louis to fight him, there wasn't one among them who would place a bet with Hogan on the outcome.

After the fight with King, which Hogan won with a ninth round knockout after cutting King to a mass of bloody pulp, there came a period when Hogan could not find a match. His boasting grew louder now, and more repulsive. Only his staunchest supporters could stomach being around him and put up with his overbearing bullishness. The others, mostly those who had lost money to Hogan while betting on the fights, spent this period of Hogan's inactivity swept by discouragement and hopelessness while they waited for some fighter to come along and cut the bully down to size.

This being the case, there was a day of jubilation among them when

it was announced that Jack Halliday was coming to Pithole City to fight Hogan and determine, once and for all, the question of the world's heavy-weight title. Halliday, they felt, was the man who could do it if anyone could. He was a fighter of tremendous strength who had recently become nationally famous by wheeling a loaded wheelbarrow from Rochester, N. Y., to Buffalo, N. Y., a distance of eighty-eight miles, without ever letting it down for a rest, and he was known to strike a blow that would fell a horse. This, to them, was to be the fight of the century and they quickly gathered together a sizeable purse to present him on his arrival.

Three days after the announcement, Halliday arrived on the stage from Miller's Farm and was promptly driven up and down the streets of Pithole City in an open buggy for everyone to see. After the parading, he and his backers set up headquarters in the saloon of the Chase House and announced that they would cover all bets from the Hogan camp. But they had had no idea of the amount of Hogan money available, so the betting was finished within a few hours and the two camps settled down to a week of drunken brawling while they waited for the time set for the fight.

The time set for this first Halliday-Hogan battle was dawn of the following Saturday. Because of this, hardly anyone slept Friday night and the blackness of night was still unbroken when wagons full of men, buggies, and men on horseback started moving out of town on their way to the field on the hillside where the fight was to be held. Excitement ran high and fighting broke out among the spectators many times before Halliday and Hogan came into the ring. But when they did come, the sight of these two super-human giants, stripped to their waists, seemed to overawe the crowd and they settled down to calling encouragement to the fighters.





PITHOLE CITY as it looks today—a deserted, lonely land. The buildings are gone and only the “ghosts” of its former greatness remain to inhabit the land.

The men squared off at a line in the center of the ring while the referee stood with his hand held above his head. Then, when both fighters signified they were ready, he dropped it quickly, yelling out, “Fight.” Both men started swinging great hay-makers. The first volley of Halliday’s punches opened a gash over Hogan’s one eye and the crowd cheered wildly at the first sight of gushing blood. But Hogan, rushing in on Halliday, caught him with a hefty right on the chin and dropped him to the ground to end the first round. Hogan went on to take the next two rounds, but the score was evened by the sixth when Halliday had three knockdowns in a row to his credit. The fight saw-sawed through the following rounds with first Hogan, then Halliday, taking the lead in the number of knockdowns, but ended in the fourteenth when Halliday was knocked to the ground and couldn’t get back to his feet.

Hogan had won the first of the Halliday-Hogan battles, but both men were so badly used up it was two

weeks before either would agree to a re-match. But a re-match was scheduled then, and took place the week following. And again Hogan won, but with the slightest of margin for twice during the fight he barely made it to the line in time to keep from being disqualified. This encouraged the Halliday backers to the point where they screamed for a re-match and for a first time in all of the Hogan fights the betting was even with neither side asking for, nor giving, odds. But when Hogan won this fight, and won it without having a really doubtful round, Halliday decided he had had enough and left on the next stage going out to the rail-head.

Sometime after Halliday’s leaving his backers brought in two more fighters from New York, Jim Linton and Fred Hill, who had been licking everyone but each other in the Big Town. Neither of them gave Hogan much of a time, and being the bully that he was, Hogan taunted their backers by drinking toasts to their health for supplying him with punch-

ing bags. Soon they were the laughing stock of the town and their interest in finding a man who could lick Ben Hogan died a sudden death.

At least that is the reason most credited for the ending of the Hogan fights in Pithole City. But there were other reasons that could have been more important in terminating them. For by now, the summer of 1866, the fabulous oil wells that had flowed fortunes from under the ground were beginning to dry up and almost every day saw the failure of a once productive well. Panic struck among the fortune-hunters and they flocked out of Pithole City; those who had the money rode out in style, while those who didn't walked the muddy roads on their way to more fertile fields. Hogan and his mistress, French Katie, stuck it out for a time but when no new strikes were made they finally gave up and moved their interests to Tideoute, a new strike that was coming into its prime on the Allegheny river.

Throughout 1866 great fires swept the oil-soaked pine board buildings of Pithole City so that by the end of the year there was little left of the fabulous city that had sprung up on the rock-studded fields of the Holmden farm. By the end of the century the scar of its being had started to heal, and today one would never guess its presence in the undergrowth that supports some of the finest bird and rabbit hunting one is likely to find in the state of Pennsylvania. Deer are plentiful, too, where ever you go in the Pithole section. Whether you're hunting game or ghosts, it's a good place to go some time. Maybe you won't get a bag of game or a trophy buck-head to hang in your den, but there is a chance you'll meet up with the ghost of old Ben Hogan when he comes back to look over the ground where he licked Jack Halliday and won, so far as he is concerned anyhow, the world's heavyweight title—not once, but three times.

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### SPORTSMAN EXTRAORDINARY

Once in a long while, the good guys make the front pages along with the murderers, accident victims, thieves, and crooks. Although the great majority of hunters are decent, law-abiding citizens, very seldom do they get the recognition they deserve.

The story of one of these real sportsmen came to light last December during the 1958 Pennsylvania hunting season for antlered deer. It involved Sgt. J. E. Smith of the Pennsylvania State Police who was hunting on the Charles Fleming farm at Dillsburg, Cumberland County. Smith had been a deer hunter for 20 long years but had never killed a buck. Purely through that peculiar twist of fate which haunts many another hunter, he had never even seen a legal antlered animal during the open seasons.

On the morning of opening day for the 1958 season, Smith sighted four deer, one of which was a fine buck sporting nine-point antlers coming towards him across semi-open farmland. He shot and hit his target hard but the buck managed to stagger into the edge of the woods. A second shot rang out as the deer disappeared and by the time Smith got to the scene, another hunter was bending over the dead animal. After congratulating him on the kill, Smith happened to casually mention that his luck seemed to be still running true to form, as it had for 20 years.

The stranger who had administered the final, killing shot to the buck and who was legally entitled to the carcass listened to Smith's story, told him that the deer was mortally wounded when it ran towards him, and then insisted that Smith claim the trophy. In relating the story, Sgt. Smith maintains that in all those two decades of hunting, he has never met a better gentleman and finer sportsman than Francis King of R. D., Dillsburg.





# The Judge, The Jury And I

By Paul A. Matthews

THE old hunter with a two weeks stubble of grey whiskers was dragging his buck from the gnarled tangle of Lost Swamp when I met him at the fork in the trail. He was a weather-beaten old gentleman, one who had lived as a foster son of the outdoors and was steeped in a lifetime of woods lore and hunting craft. His bleached dungarees and faded plaid shirt portrayed a man who had not yet succumbed to the stiffness that comes with old age. He was a still-hunter; the rare breed of man who prowls the swamp bottoms and laurel thickets, finding deer curled in their beds under hemlocks so small that the casual observer would never give them a first glance. He carried a rifle of nearly antique vintage chambered for a cartridge that made its debut back in the 1890's and was discarded as a military cartridge back in 1903. Mentally, I compared mine with his; like putting a new model Cadillac in the same show room with the old three-pedal Model T!

But there was a lesson here, I thought. The old timer *had* his buck while in my pocket, I carried the newly emptied case fired back along the trail apiece. You see, I'm a still hunter, too, and I was headed for Lost Swamp when I heard the shooting on the ridge a quarter of a mile behind and camouflaged myself against the trunk of a granddaddy pine and waited to see if the deer might be en route to the swamp and run past me.

I called the play just right. There were three does that came through first, panting and snorting in fear of judgment day as they ran past, and then maybe thirty seconds later, I spotted the grey shadow of a buck

picking his way cautiously and using every bit of cover to his advantage. He stopped momentarily behind a clump of pencil-sized saplings and I eased off a shot that by all rights should have dropped him dead with a shattered heart. My mouth sagged open with shock as his flag disappeared from view in the laurel.

A miss? It couldn't be! I'd killed sixty-three chucks with only seventy shots that summer with this rifle. I couldn't miss a deer thirty or forty times larger and a lot closer than any chuck I'd killed. I checked the spot where the buck had stood and there was no blood; not even a hair on the clean surface of the snow. Something was haywire here. Maybe this Old Timer could straighten me out.

After the formalities of greeting were done with, I told him of my experience, and I somehow sensed, rather than saw, the frosty look in his eye as he appraised the rifle I carried.

It was a beauty; lovingly and carefully made by hand at the local gunsmith shop, with every dimension on it just exactly as I had specified.

"It's a honey of a varmint rifle," I told the Old Timer.

"It shore is, son," he replied in a voice sharp enough to cut glass. "Why don't you either use it to hunt varmints with, or else git out in the open country where you'll have clean shootin'?"

"Whoa! Hold on here now, Old Timer. Let's get things on a friendly basis. I just lost a buck back there and thought maybe you could give me a bit of good advice."

He look me over critically, from the bright yellow cloth pinned on the back of my jacket to the soles of



my badly worn hip boots, and when he saw I was sincere in my request for advice, he brushed the snow from the top edge of a fallen tree, made himself comfortable, and lost no time in producing a well-charred cob pipe which he slowly and methodically filled with tobacco. A master musician couldn't have pointed his violin bow with any more dignity than did the Old Timer when he pointed the stained stem of the pipe at me.

"Hunting deer," he said gravely, "should be considered a sport; not an excuse to get our behinds off the office chair or spend a day in the woods away from the wife and family. Forty years ago, when deer were scarce in Pennsylvania, I trailed a buck for three days, spending the nights in the woods by a campfire, before I was able to get in a single shot. I crippled that buck and had to trail him the entire forenoon of the fourth day before I finally killed him. Nowadays, a man thinks nothing of shooting at several deer in the course of a season, maybe killing one—maybe not. He doesn't seem to care. What counts is chuckin' out lead and listening to the rifle go 'boom.'"

I smiled at the Old Man's philosophy and began trying to think of a way to cut the conversation short. But like a *Peleean* class volcano, the words had piled up inside for

many years, and from all indications, were about the spew forth in a fiery blast that would soon have the hemlock needles browned and curled on the snow. I shifted my rifle across my forearm, making an uneasy shuffle with my feet and peering longingly into the shadows of the swamp.

There was a terrific cannonading on the ridge behind us and as I tensed at the thoughts of deer passing through, the Old Man snorted.

"Hunters!" he said. "More like a bunch of first graders playing ring around the rosies. They'd *take home* almost as many deer by busting paper bags."

I squinted at the Old Man, maybe a little bit condescendingly because I thought he deserved it. "They must have hit something with all that shooting."

"Like as not they did, son. But they ain't takin' them home. Watch—there go the deer now across the fire line and into the swamp." He pointed the pipe stem at the brown figures as they cleared the trail with a single leap. "Notice that last one? He's hit. See how he's cut away from the rest of the bunch. He'll fold up before long."

I watched the deer indicated and like the Old Timer had said, it cut away from the group, though from all outward appearances, seemed unhurt. I watched his flag as it bobbed around the shadows of the swamp, and then in an instant it was gone.

"That deer's down," he said simply.

I was itching to get away from this ancient mariner and take after the deer, but by his insistence, I stayed put for a good five minutes until it was obvious that the party who had done the shooting was going to make no attempt to follow the trail. Then the two of us went down the fireline to where the deer had crossed, singled out the track of the one he said was wounded, and followed it. I must confess, I swelled up with pride when we were unable to find



any blood. The Old Man was wrong and I easily visualized the deflating of a large balloon.

It was maybe thirty yards inside the swamp where we found a large doe sprawled over the top of a windfall. She was dead as a hammer and a small trickle of blood was just beginning to ooze from the small hole high in her chest.

I anticipated a smug look on the face of the Old Man, not the expression of sadness that overcomes a teacher who has had his last hopes of sharing an education shattered by a refusal to cultivate a potential brilliance. He sagged visually, as though the muscles that had supported him for years had finally played out.

"Now you've seen it, son," he said softly. "Criminal negligence committed by a man who not only knows better, but should be the last man in the world who would want to commit such an act. *For every four deer tagged in the State of Pennsylvania, there's another one just like that doe—wounded, dead, or dying in the woods, and left to rot!*"

It took some time before I could grasp the enormity of the Old Man's statement. If one considered the normal bag of the season to be sixty thousand, that meant that by the end of this season there would be another fifteen thousand like the doe, "and that," I said, "is a lot of deer no matter how you count them."

He nodded approvingly at my mental calculations, and at the same time nibbled thoughtfully on the pipe stem.

"There's four causes for this waste," he said holding up a gloved hand with his thumb obscured from view. "Four causes that can be eliminated only by men who recognize deer hunting as one of the greatest outdoor sports we have, and who are willing to use a little judgment in protecting that sport."

"First," he said, "is the fact that too many hunters are overlooking the importance of marksmanship. In

their mind hunting isn't a sport; it's a fad. It's the thing to do because everybody else is doing it. Each Sunday afternoon before the opening day of the season, you can sit in camp or drive along a country road somewhere and you'll hear men sighting-in or practicing with their rifles. They don't realize that it's impossible to acquire any semblance of marksmanship in a single afternoon."

The Old Timer had a good point there, I'd listened to and seen more than my share of the 'one day a year' rifleman.

He bent back his index finger with a force that snapped his socket so loud it was clearly audible through the padding of his glove. "And this thing we just saw; men shootin' at game and never following the track. They think deer hunting is like betting on horses; you either win on the first shot or not at all. A deer, son, can be shot high in the chest and never shed a drop of blood until the chest cavity is filled and the deer drops dead. Of course by that time it has run a hundred yards or better and the hunter has already moved on thinking he made a clean miss.

"The third cause of game waste needs no description or explanation of prevention. There just isn't any sense of shooting at a deer you can't identify as legal."



Again the Old Man was right. Right then I was anxious to get into the swamp because I had a hunch that there had been a buck in the group of deer we had seen. I shook the Old Timer's hand, and while he was busy rummaging around his pockets for a match to relight his cold pipe, I cradled my rifle across the crook of my left arm and made a bee-line for the fringe of hemlocks. I had almost made it, too, when he hol-lered.

"Hey, you whippersnapper!"

He was blowing fragrant clouds of blue smoke in the frosty atmosphere by the time I returned, and there was a spark of amusement in his eye. He surveyed me critically as he had done before, as though trying to soften the putty before smoothing out the lumps. "You're the fourth cause," he said simply, "a good man in the woods but an arm chair ballistician who feels that the successful bagging of deer is the direct result of the figures you see published in the velocity and energy columns of ballistic tables!"

I dug my little finger into my ear to facilitate the entrance of this sage information and simultaneously gave up all hopes of ever breaking away from the antiquarian supplying the same.

"Look, mister," I said, "I realize you mean well with your advice,—and I asked for it and agree on the points you have stated. But I do know that the lowly .22 rimfire can and has been used at some time to kill every species of game on the North American continent. Now you're trying to tell me that I'm using a rifle that isn't suited or adequate for a little animal that seldom dresses over a hundred and a quarter. Now, I'm really interested in hunting this swamp this afternoon, but I'm also willing to sacrifice maybe ten or fifteen minutes to hear good advice—that is if you can keep it short."

I softened my words with an apologetic smile hoping to keep the discus-

sion on a friendly but short basis. The old gentleman acknowledged my gesture with a leathery smile of his own, and as the two of us started back to where we had left his buck, he outlined the fourth cause of game waste in the December woods.

"Deer," he said slowly, "are no harder to kill today when they were a century ago when we were using cap and ball rifles. In fact, our higher-velocity cartridges and modern-designed bullets result in quicker and more humane kills than was possible with the muzzle loaders. But it has also changed the average outdoorsman's outlook or conception of what constitutes this sport we call hunting.

"It used to be that a man owned and used but one rifle for all species of game, be it squirrel, deer, Indian or buffalo. And since he depended on that rifle for a livelihood and had but one single shot at his disposal, he soon learned the limitations of his weapon. Now that's where the 'hunting' came in. If he was shooting a .32 caliber round ball, he was likely to pick out a place near a spring or a good feeding spot where he'd have a clean, open, short-range shot at his deer. But if his gun was bored for a .45 or .52 caliber round ball, he wouldn't hesitate in taking to the swamps or thick alder patches, because he realized the heavier ball was adapted for and fully adequate for brush hunting. And even if he lost sight of his game after his shot, he was assured of a good blood trail.

"But nowadays, even though we have dozens of different calibers to choose from, each of them designed for a specific purpose, and almost all of them available in three different type actions, we insist more and more on using just one rifle for all species of game, *but with no consideration of whether that rifle is adapted for the individual's method of hunting or whether the individual hunts within the limitations of his rifle.*"

Just then I failed to follow the



pathway of the Old Timer's thinking, but somehow enough of the meaning penetrated to make me conscious of the sporter cradled across my arm. I ran my fingers along the stock, feeling the soapy smoothness of the finish and marveling at the rugged curl of the grain. Somehow, I felt, this old hunter was condemning a friend of long standing.

As though he understood my thoughts, he stopped me there in the middle of the trail, a prisoner on the dock before a grim, but time-honored jury of hemlocks, oaks, and beeches. "Listen, son," he said, "it's just plain common sense that a rifle and high-velocity cartridge designed for long range, precision shooting is not efficient in the brush, and by the same token, a cartridge designed specifically for brush hunting isn't going to be efficient at long ranges across canyons and wide open grain fields. It's just as simple as that; if a man *insists* on mixing his deer hunting with his varmint hunting, he has to hunt both

species of game within the limitations of his rifle. A short range brush weapon for deer is still a short range weapon for chucks, and a long range rifle that's shooting a light-weight, high-velocity bullet has got to be used in the open country. Trying to alternate the two is like pounding round pegs in square holes—a misfit no matter how you attempt it. And a misfit weapon or hunter in the woods is conducive to crippled game."

This Old Timer, for all his preaching, was looking at conservation from a point of view entirely different from that usually heard. Hunting in the swamp that afternoon not only lost its glimmer of importance, but began to give me a feeling of guilt. Whereas, earlier I had visualized a big buck crashing through the laurel and being brought down with a single shot from my sporter, I could now see him struggling for the depths of the swamp with his near shoulder torn and bleeding from fragments of a light-weight, high-velocity bullet that



was never intended to penetrate brush. Sure the box of ammunition had illustrations of both chucks and deer on it, and from an engineering point of view, the bullet would deliver so much energy at a specified range. But, in thinking over the number of chucks I'd killed that summer, and the way the bullets had disintegrated completely within such a small animal, it began to seem ridiculous to think these same bullets would perform efficiently in the brush and on an animal which was thirty or forty times larger and heavier. What made the situation even more ridiculous was the fact that most of my chucks were geeding quietly in the cool of the evening, never once suspecting a hunter was even in the vicinity. But the majority of deer shot at in the woods are badly scared; a driving bundle of nerves intensely stimulated with adrenalin and seldom offering an opportunity for exact bullet placement such as was possible with the chucks, and which is an absolute necessity if a hunter is to make any kind of a clean kill on deer with a rifle primarily designed for varmints.

The Old Timer was more than just a hunter; he was a clean-cut example of the type sportsman often written about, often discussed, and seldom seen because words are much simpler than actions. To him, hunting was a sport; an American heri-

tage to be cherished and preserved. It was his one tangible nugget of the past; a nugget sometimes badly corroded into obscurity, and the Old Timer was like a scratch on that nugget that penetrated the vertigris, exposing the true color of the metal underneath.

That was the last I ever saw of him, there on the edge of the swamp declining my offer to help drag out his buck. Even that, he explained, was part of the sport of hunting. It was the difficult part of the game that would enrich his nostalgic memories in the long "rocking-chair" years ahead.

Me? I've still got the little sporter I carried that day and I use it consistently for varmint shooting each summer. But when I go to the woods, in the snow-laden swamps and brush lots, I carry a rifle chambered for a cartridge specifically designed for that type of hunting. And each time I pause for a few minutes of relaxation, I hear the Old Timer summing up his case before a jury that brings in no verdict of its own, but lets the accused act upon his own judgment of the advice offered. If the advice is accepted in sincerity, there's little need for a penalty; if refused, the penalty becomes a reality and hunting, a colorful past that passes from existence, except on the pages of fiction.



# Venison On Sunday

By Bill Walsh

**"T**ASTES like deer," Grandpa grinned and cut off another forkful, stuffing it into a mouth that looked as though it could hold no more. He was too busy chewing to say more save an appreciative "Mmmmm!"

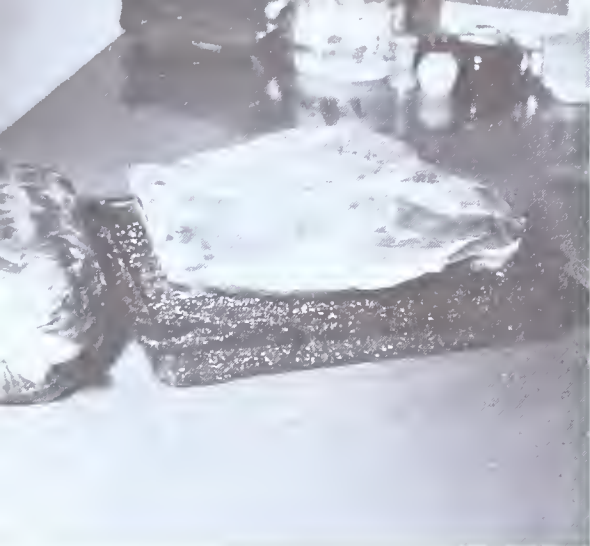
So we turned to the task of carving the rest of the roast leg of venison we'd whipped up for this special "company-coming" Sunday dinner. The women had cast suspicious glances at the unfamiliar appearance of the cut as we carried it from the kitchen into the dining room, but admitted it "Smelled good." Soon, they, too, were busy with their plates and with everyone served it was our turn to enjoy the meat of the young buck we had outsmarted, killed, butchered, and finally prepared for the table. And as we ate, we wondered how many other Pennsylvania families duplicated this scene as an aftermath of the 1958 season.

The Pennsylvania Game Code allows successful deer hunters a six-month period in which to enjoy the fruits of their marksmanship. Where the flesh is fully appreciated it is a period of pleasure which features periodic feasts on the various cuts. In others, when the novelty has worn away, disposal of the meat becomes a problem. Possibly the following remarks can add to the enjoyment of table venison in either instance.

First, since no one eats enough venison in these times to get thoroughly acquainted with all its possibilities, there is a philosophy concerning its use that logically precedes its preparation. At least it's our philosophy and here's how we've summed it up:

"Venison is the flesh of the deer—and in its finest and most tempting table form the flesh of our own Whitetail deer. The man or woman called upon to prepare it for eating





WITH SHANK REMOVED and the rack greased, the leg of venison is ready to be popped into the oven. Here it's shown together with a 12-pound boneless ham for the sake of comparison.

must not expect its flavor to resemble any other meat—for the same reason that beef has a different flavor from that of pork and that mutton presents flavor and seasoning possibilities different from those of veal, or ham, or turkey, or for that matter—weiners. It has a flavor of its own. It must be enjoyed for what it is—and menus must be built around it for what it is." Fair enough?

Now let's go back to where we put that leg of venison in the oven. Step by step:

Place the broiler rack in the pan, greasing it with cooking oil to prevent sticking later on. You'll notice venison has little fat of its own. When the rack is well greased, pour a half-cup of water into the bottom of the broiler pan (more if it's a large pan.)

Put the roast on the rack, round side up, and slide it into a pre-heated oven of 400 degrees. Set the timer (or check your watch) because you'll be reducing the heat to 325 degrees following the first 15 minutes. While you wait for the time to roll around, prepare your basting liquid. This is made from a half-cup of cooking oil (Mazola, peanut oil, etc.) two tablespoonfuls of wine vinegar, one teaspoonful of curry powder, and a dash of garlic powder or garlic salt. If you

don't like garlic, use onion powder or onion juice.

When it's time to reduce the heat, brush, pour, or syringe part of this basting liquid over the roast. Repeat this every ten minutes or so during the entire roasting period. When the liquid is all in the pan, use a syringe or ladle to take it up from the bottom of the pan and continue basting with it.

After the second basting, use a flour sifter or shaker to sprinkle an even mixture of about one-quarter cup buckwheat pancake flour, a teaspoonful of salt, a dash of pepper, and a dash of paprika (all these mixed together of course) over the top of the roast. This will gradually become a golden-brown color and will help the roast retain its moisture.

About three hours will cook the average leg of venison to medium rare on the inside (and the best way to serve it, taste-wise and tender-wise.) However, another half-hour will be putting it in the medium well-done category if your family prefers it that way and yet another half-hour will have it completely well done. You male cooks who are trying your hand the first time are warned that you may have to replenish the water supply in the bottom of the roasting pan from time to time, so check this when you baste the roast.

And when everything's all done, don't throw this heavenly mixture of juices and drippings away. Man, that's the foundation for your gravy. Get it out of that pan and into a saucepan. Add more water to make as much gravy as you need and into it place two teaspoonfuls of mint jelly. As it heats, mix one tablespoonful of flour (for each cup of gravy) in cold water in a measuring cup. Add the water a little at a time, stirring vigorously and continuously to avoid making "lumps."

When this water-flour mixture is thin and smooth, add it to the gravy on the stove being careful to do this **BEFORE** the gravy stock comes to a

boil. If it has begun to boil, cut the flame, add a little cold water, then add the flour-water mixture, stirring constantly until the gravy comes to a boil and thickens. Should you add the flour-water mixture to boiling stock, you'll get miniature dumplings, otherwise known as "the lumps in the gravy that mother used to make." Following these directions will give you a smooth and delicious gravy that will make your wife and family wonder which hotel chef has been showing you the secrets of his kitchen.

Just as important as how venison comes from the kitchen is what the cook selects to serve with it. Some foods seem to "go" better with venison than others—just as sauerkraut is wedded inseparably to pork, or strips of bacon go steady with a pair of sunny side-up cackleberries. Here are some dishes that complement the flavor of venison.

*Side dishes:* succotash, creamed corn, creamed peas, potatoes (served any way but with a preference for those baked in the shell), wild rice, buttered domestic rice, buttered hominy, sweet potatoes, and asparagus tips.

*Salads and relishes:* head lettuce, tossed salads, tart gelatin salads (avoid the sweet, fruity ones with venison), cucumbers in vinegar, cole slaw, grated carrots in mayonnaise, olives—green and ripe, radishes, green onions, celery, pickled eggs, sweet pickles, cranberry sauce, and most similar dishes not in the downright sweet category.

*Beverages:* generally speaking only hot beverages should be served with venison. After you've cooked much of it you'll notice that its own fat congeals at a higher temperature than most and serving cold beverages with venison accentuates the taste of this fat.

*Desserts:* stick to old and simple favorites like apple pie, pumpkin pie, mince pie, sherbets, etc. However, the area of desserts is more wide open

than the others because it does not have to be eaten WITH the main course.

So much for the roast leg and some dishes that go well with venison. How about those chops?

These are best broiled (charcoal if you can arrange it) but they're also delicious fried and served with mushrooms. A lemon-butter sauce is often used to baste the chops when broiling—just once, when turned. They require no special treatment or preparation, even in an old deer, and are extremely tender and tasty.

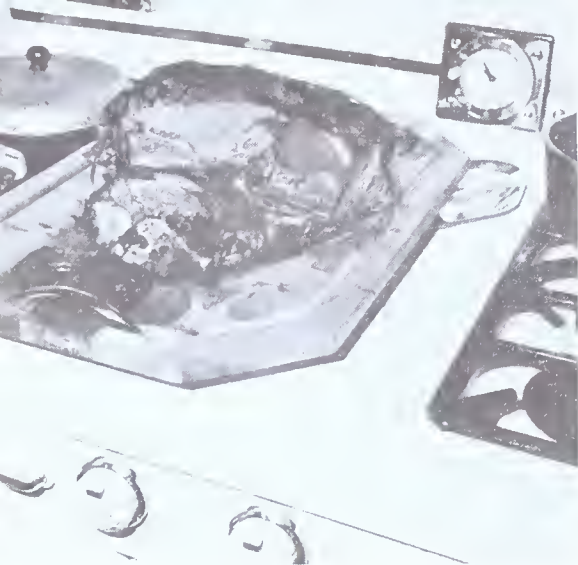
The meat of the neck makes good cubes for stewing. One year we used the meat of the neck to good advantage in mince-meat and it made some of the most delicious pies we've ever eaten.

Whether your deer is prepared by you, or by a commercial operation, the "deerburger" is a tasty by-product of the butchering and the meat that goes into this mixture may be from forelegs, between the ribs, etc. Cook it much like hamburger or ground beef—or use it to make delicious meatloaves. It is even good in meatballs with either Swedish or Italian inclinations. Or if you know of someone who can conjure part of it into sausage, let it go.

FIFTEEN MINUTES after the leg of venison is placed in a hot oven, it's pulled out for the first basting. A basting syringe, as shown here, provides the easiest and simplest way to baste venison but the basting sauce can be poured over the meat just as well.







**PROOF OF GOOD EATING** is shown here. The big roast has been reduced to less than half its former size. It can be re-warmed, however, or it will make fine cold slices for sandwiches.

And now for the steaks—those four to eight slices on each leg (depending on the size of the deer and the generosity of the butcher with his cut) that make up the most talked-about part of the animal. When you roast the entire leg you sacrifice the steaks to the roast. When you cut them out they're available for broiling or quick-frying.

Probably the most important thing

to remember is to treat the steaks the same as you would prime beef. No matter how old or young the deer it came from, a venison steak—as beef—will be best cooked quickly and in the minimum time it takes to get the meat to the stage preferred by the individual who will eat it. Like beef, venison is tenderest when served rare. However, if the diner **MUST** have it well done, make sure he gets it the moment it has reached the well done stage. Each additional second over the fire in a frying pan or under the fire in a broiler will destroy precious juices and cook away fats that venison can ill afford to lose.

Of course, the best venison, like the best beef, comes from quarters that have been aged in a special way for tenderizing. The best way to accomplish this is to persuade a butcher friend to hang it with his beef. Allowing the animal to hang where air can circulate around it—and where it is cool enough to keep and not cold enough to freeze—before butchering is the best substitute. But that occurs before it reaches the kitchen and a bit outside the province of this yarn.

**FINAL BASTING** is given roast before serving. In another ten minutes it will be ready for the table. The cook uses this time to get ready to make the gravy, whip the potatoes, get the coffee on, etc. Also to tell the kids and others to wash up and be seated.







## WALKIN' SHOES

By NED SMITH



## Fur-Bearing Snakes

1. What part of the weasel's coat does not change color in winter?
2. How many species of weasel's are found in Pennsylvania?
3. Weasels are extremely afraid of humans. True or false?
4. What is our smallest carnivore?
5. As a rule weasels are highly beneficial animals. True or false?
6. What is the fur called ermine?
7. What is the common gait of the weasel?
8. Gray squirrels form a large part of the weasel's diet. True or false?

**I** ONCE heard an obviously prejudiced man refer to the weasel as a "fur bearing snake." While, from a scientific viewpoint, the description is ridiculously inaccurate, it must be admitted that the small flattened head, fierce beady eyes, long neck, and slim body do have a serpentine look about them.

Three species of weasels inhabit Pennsylvania, differing somewhat in appearance but similar in habits and temperament. Here are their names and descriptions:

**New York Weasel.** This, the largest and most common weasel in the state, is often called the long-tailed weasel. The males attain an overall length of about sixteen inches,

roughly a third of which is tail. The upperparts are dark brown in color, while the underparts are yellowish-white. The feet are generally brown, while the tip of the tail is black. A few individuals, particularly in the more northerly situations, shed their brown coats in exchange for white ones in winter, producing the famous white fur known as ermine. The tail tip always remains black.

**Bonaparte's Weasel.** This animal is sometimes known as the short-tailed weasel. It is smaller than the preceding species, males averaging a foot or so in length, less than three-tenths of that measurement consisting of tail. In summer coloration it differs from the New York weasel chiefly in having white toes and a white line down the inside of the hind legs. The Bonaparte's weasel is more common in the northern part of the state, although it is nowhere as abundant as its larger relative. Most specimens in this latitude turn white in winter, retaining their black tail tips in all pelages.

**Least Weasel.** This diminutive fellow is the smallest known carnivore. Only the largest males attain a length of eight inches including the tail. Most are six or seven inches long with a body the thickness of your

thumb. Like its closer relatives the least weasel is brown above and white below, and turns white in winter. Unlike them, it has no black tail tip in either summer or winter coat. The least weasel is Pennsylvania's rarest weasel. It has been reported from nearly all parts of the state, but is apparently most abundant in the western and southwestern portions.

All three species of weasels are predators of the highest order—in fact Nature has created few, if any, more perfect killing machines. To begin with, their insatiable appetites keep them continually at their task of controlling small animal populations. To match this lust for blood and flesh Nature has given them almost unmatched energy and endurance. To lead them unerringly to their victims she has given them a highly developed sense of smell and ears that can pick up the faintest of rodent whisperings. She has streamlined their bodies until they can flow through mouse holes like water, and has given them needle-sharp claws with which they can take to the trees like squirrels. They can cover the ground with surprising speed, and their movements are too swift for the eye to follow. Their weapons, a set of sharp teeth, are actuated by unbelievably powerful jaw muscles.

The weasel doesn't lean heavily on stealth. If he is unable to secure his prey with the initial rush, he relentlessly follows its trail wherever it may lead. Birds, of course, will fly away and squirrels can usually manage to outclimb him, but for most small creatures there is no escape once the weasel takes up the chase. Even the fleet-footed rabbit is a pushover. Like a prize beagle the pursuer will keep everlastingly at it until at last the tired bunny can be overtaken in a few swift bounds. Though our sympathies may be with the cottontail, it's hard to refrain from admiring the tremendous strength that enables a two-ounce weasel to slay and drag away a three pound rabbit.

The weasel's victims are generally killed with a bite at the base of the skull or by slashing the throat. Unfortunately, (in the case of poultry, and fortunately, in the case of rats and mice), this little demon sometimes gets carried away by the excitement of the kill and destroys many more creatures than he can possibly use. These are often cached in a rockpile, under a boardpile, or in some similar place.

In most cases weasels are extremely beneficial. Not from pre-meditated benevolence, to be sure, but due to availability and taste most of these predators concentrate upon rats and mice. Occasionally, however, rabbits, chipmunks, poultry, and birds are taken. Modern poultry-raising methods and elimination of the rats that attract the weasels in the first place have greatly lessened these attacks on domestic fowl.

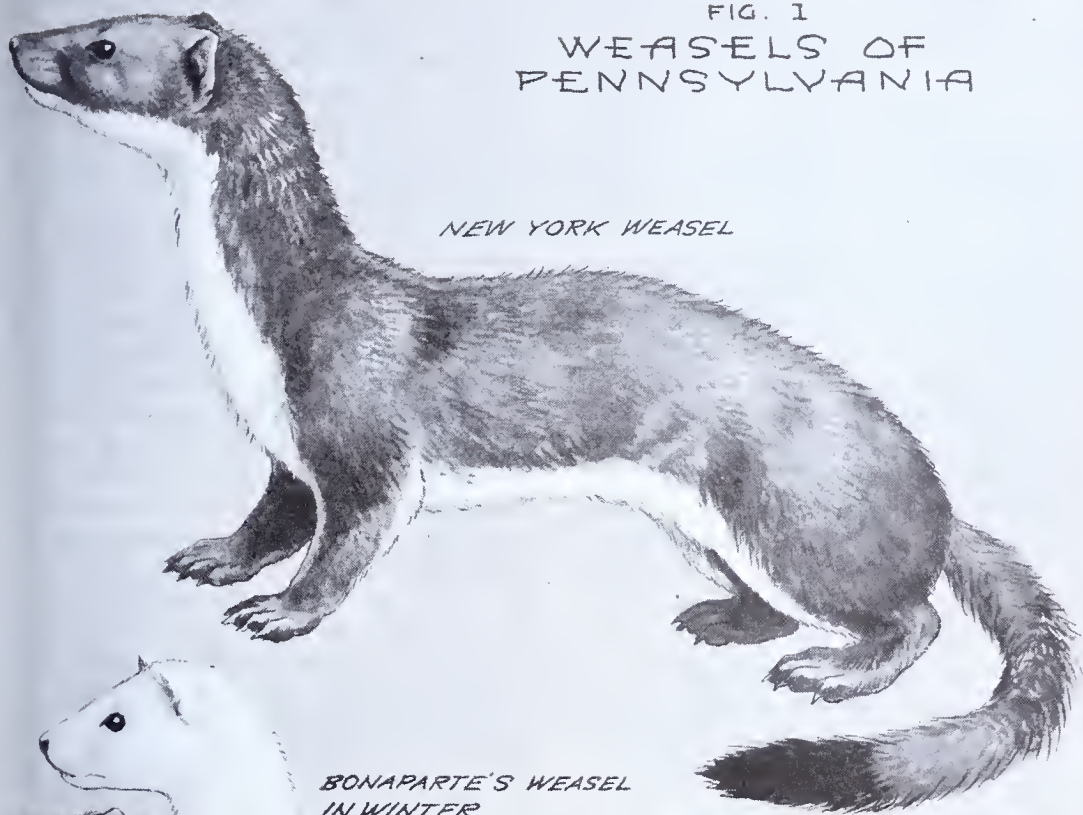
Weasels are noted for their lack of fear in the presence of humans. Ornithologists who call birds to them by "squeaking" have frequently been surprised to see a weasel dash right up to them in answer to their imitation distress call. In one instance I have had a weasel actually dart between my feet to retrieve a meadow mouse it had been forced to drop. Numerous outdoorsmen have had surprising experiences while rescuing rabbits or other prey from their attacks, and one person I know actually engaged in a tug-of-war with a New York weasel that was determined to drag a cottontail into a groundhog hole.

As might be expected, this animal is too brash to be cunning, and consequently is far from difficult to catch. Trappers rarely bother to conceal their traps, knowing full well that he'll dash across a bare pan as readily as a covered one.

It's hard for most folks to believe that the weasel is closely related to the skunk. Trappers don't find it so hard to believe, for they've discovered that the former, too, emits a foul

FIG. 1  
WEASELS OF  
PENNSYLVANIA

*NEW YORK WEASEL*



*BONAPARTE'S WEASEL  
IN WINTER*



*BONAPARTE'S  
WEASEL IN  
SUMMER*

*LEAST  
WEASEL*





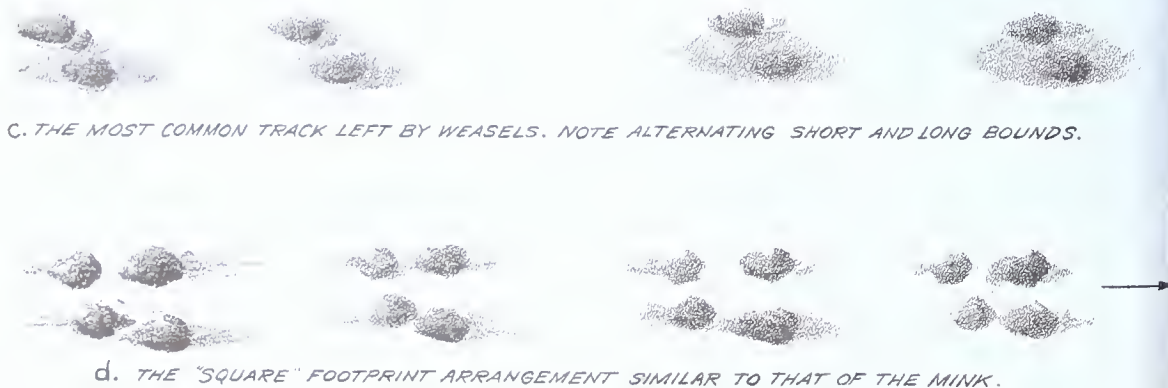
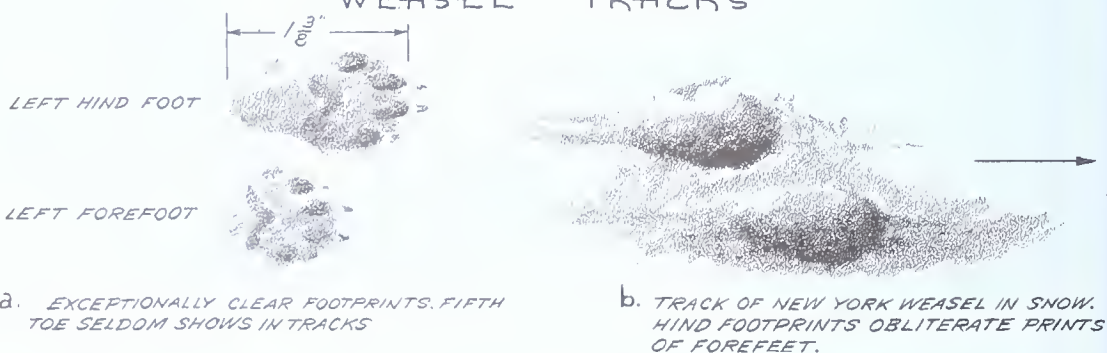
odor when injured or annoyed. Though not so overpowering, the weasel's sachet will take a back seat to none on the basis of just plain stink! Amateur trappers who have accidentally cut into the glands that secrete this musk have asserted that they'd prefer a direct hit from a skunk any day.

Home sweet home to the weasel might be the abandoned burrow of another animal, a tunnel under a rockpile, a retreat beneath the floor of an outbuilding, or some other subterranean domicile. The parlor proper consists of a chamber lined with fur, feathers, or other remains of the housefrau's victims. The young are born in similar nests in the spring of the year, and a half dozen is considered an average litter. Both parents share the responsibility of raising the young, and as soon as they are old enough to be abroad they accompany the oldsters on hunting trips. While there is considerable in-

dividual variation among the parents, most are quite fearless in defense of their young. In fact, they have been known to actually attack humans when their offspring have been threatened.

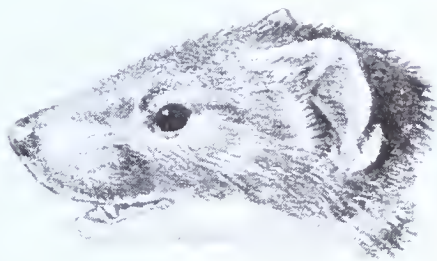
Wintertime is a good time to learn how many weasels live in your neighborhood, where they travel, and what they're up to. Once you learn to recognize their tracks every fresh snowfall will reveal up-to-the-minute information on their doings. The individual footprints are about fingertip size in the case of the New York weasel, smaller when made by the other species. The most common arrangement is the bounding track shown in figure 2c. In this track the rear feet obliterate the prints made by the forefeet and are arranged a trifle obliquely. The spacing between the pairs of impressions is not always uniform; in most cases it indicates alternating short and long bounds. At times the weasel leaves a "square"

FIGURE 2  
WEASEL TRACKS



arrangement of footprints as shown in figure 2d. Due to his short legs the impression of his body often appears in soft snow.

Don't miss an opportunity to follow a weasel track in the snow. All the details of his tireless hunt are there for you to read—provided you have the patience and imagination to interpret them. As you follow the twistings and turnings of his travels and read his own account of encounters with other wild creatures, of success and failures along the way, you can't help but admire the strength, endurance, and unflagging perseverance of this indefatigable little hunter.



#### ANSWERS TO THE QUESTIONS

1. The black tail tip remains the same color throughout the year.
2. Three.
3. False. They are notable unconcerned about the presence of man.

4. The least weasel.
5. True.
6. It is the white winter coat of the larger northern weasels.
7. The bounding gait.
8. False. Although it is a skillful climber the weasel is not a match for the gray squirrel.

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### NEW BOOK ON BOBCATS OFF PRESS

"The Bobcat of North America" by Stanley P. Young is the newest addition to the Wildlife Management Institute's series of authoritative books on native birds and mammals. This volume brings to four the author's monographs on the major predatory animals of the continent. His earlier books are "The Wolves of North America," "The Puma, Mysterious American Cat," and "The Clever Coyote."

Well bound and freely illustrated with black and white photographs, thumbnail sketches by Harold Cramer Smith, and diagrams, this new book brings together all worthwhile information on the bobcat from America's earliest colonial times to the present. The author, now director of bird and mammal laboratories in the Branch of Wildlife Research, Bureau of Sport Fisheries and Wildlife, has had more than a quarter-century of experience with that Federal wildlife agency and its predecessors. Much of Young's work in the early days hinged around the control of predatory animals, and he probably has handled, weighed, measured and studied more specimens, alive and dead, of the bobcat in its many races than any other wildlife scientist.

Student, sportsmen, naturalist, and wildlife worker—all should be equally interested in this book. All known aspects of the life, habits, and characteristics of bobcats are covered. The section on hunting and control should be of special interest to sportsmen and trappers.

"The Bobcat of North America" is available from the copublisher, The Stackpole Company, Telegraph Press Building, Harrisburg, Pennsylvania, at \$7.50 a copy.



## "Trophy Hunting -- Keystone Size"

By H. R. Wambold

**I**T seems that with the exception of the "chosen few," most of us, who love our hunting, are in the "financially embarrassed sportsmen of America club"! Membership means that we do most of our hunting at or near home.

I became a member of this club the day I went on my first hunting trip. I must say, that although I long to make those fabulous hunting trips into virgin territories with a guide-outfitter as my sole companion, staying inside for a month or better, I usually wake up. Facing the facts, I realize I am just another Dutchman who has to work for a living.

Confidentially, I will admit that the thought of shooting a giant Kodiak bear, a full curl ram, or a majestic bull elk, has more anticipated delight than sharing my shower with Marilyn Monroe.

But that old hole in the wallet has kept me in my own back yard, along with all my brother lodge members. Along with this restrictive member-

ship, I can honestly say I have had many enjoyable years of hunting in my native Pennsylvania woods.

In the buck season of 1942, I got my trophy buck—a beautiful eight point 149 pounder. His head hangs in my den, and I covet him as much as any trophy in the top ten of the Boone and Crockett club.

As usual that year held the customary pre-season anticipation. Finally the first day arrived, clear and cold, and with fresh snow covering the wooded areas. Daylight found me at my favorite stand with two companions stationed within calling distance. My stand was located in a slight draw, leading from a flat into a small swamp. We were hunting the mine ridge above World's End Park in Sullivan County.

This spot had yielded four buck in the past four years, but up until this year, I had not as yet shot my first buck. From opening time until an hour later things were quiet. Then, several minutes later, a shot brought



me to my feet. One of my buddies had connected—it was a nice fat six point buck. After dressing and cooling the buck, and hearing several recounts of the shooting, getting the buck to camp was next on the agenda. We thought it unnecessary that all three of us go back to camp with the deer, so they agreed that I should remain on my stand until they returned.

Several minutes after settling myself on watch, I heard two shots fall back in the flat. After about five minutes had passed, I saw a deer coming towards me. As it got closer, I saw the rack, a buck and a beauty. Pausing and watching his back trail, he slowly came closer and closer. I had my rifle ready, safety off, and nerves tensed. Curbing the desire to shoot, I waited as he worked his way towards me. Finally at about fifty yards, he stopped under a small hemlock. Turning in the direction he came from, he watched his back trail. My sights were on him as my heart tried to pop out of my throat. I swore he could hear my heart thumping, as he turned suddenly and looked in my direction. Then as he quartered slightly away from me, I was ready. With all the calmness I could command, I squeezed the trigger. The sound of the shot brought me back to reality with a thundering clarity. From the first sight of him until the report of my rifle, it seemed that this buck and I were all that existed in all of Sullivan County. I had aimed for a lung shot, and as the report echoed through the draw, he was off a full throttle. His flag up, and giving no indication of being hit, he headed for the other side of the draw. I followed with my sights waiting for an opening. Finding one as he got to the opposite side of the open timber, I let go with a second shot. At the report, he made a leap straight into the air and vanished. I figured he made it into the hemlock thicket on that last leap. Starting

across the draw as fast as possible to check, I finally saw him. He lay in a slight hollow just at the edge of the thicket, as he drew his last breath.

It was a perfect season, and a beautiful buck. My first, and indeed an unforgettable experience.

Then, leaving my hunting behind for three years, I answered a personal letter from the President of the United States for an appointment that he requested. I returned to civilian life in February of 1946, my only hunting during that time was one day in Nebraska for pheasant, jack rabbits in Kansas, and wild pigs on Okinawa.

The 1946 season was a blank, didn't see a buck during the week of hunting, but was sure glad to be back home in the good old Pennsy woods.

As the seasons for 1947 and 1948 followed, I again drew blanks, but enjoyed every last minute while in camp.

1949—chalk up one buck missed. Not a very good shot, but still that chance of hitting. Not disgusted, merely not too contented.

1950 to 1953—no buck, shot doe in the antlerless seasons. Then in 1953 two shots at a dandy thirteen point buck, and again not disgusted, merely not contented. I had seen the buck later that day hanging at a neighboring camp, thereby knowing he had a thirteen point rack. The boys had dropped him as he ran down the ridge towards them, after my two shots had sent him off the top.

1954—another blank, but a wonderful time. Saw over a hundred deer during my week of hunting—beautiful weather, plus the usual good fellowship while in camp.

1955—another blank with a bit of irony to boot! Had just left a stand I had sweated out all morning, and met a friend on the way down the ridge. He went up to the spot I had watched and shot a beautiful buck. I talked to myself that evening when

I heard about it. Finished the year with a nice doe in the antlerless season.

1956—bonanza year! He who waits with patience, someday has the hunting gods smiled upon him. They went into hysterics that year for little old me.

Accepting an invitation to hunt with natives in Colley, a small town in Sullivan County, just east of Dushore, I went up to join them for a day of bear hunting. Seven neighboring farmers, my buddy and myself made up the party of nine.

We had a perfect tracking snow fall overnight, and woke up to four inches of fresh white gold. Clear and sunny, and not too cold, we were off to a late start after all the chores were done.

I insisted on driving as my share in the hunt, being an outsider so to speak, and left my buddy go on one of the stands. The result was that two of us did the driving, with the idea that we were only to get the bear moving. Then the standers would take care of him as he came off the mountain on one of the regular bear crossings.

We took the fresh track from the night feeding in a corn field and followed it up the side of a ridge. We found where the bear had backtracked and lay down to watch the side of the ridge. The impression in the snow showed that he had laid just long enough not to melt through to the ground, then resumed his traveling.

Till we got to the second last bench on the side of the ridge, we had found three beds where he had come back and lay and watched his back trail. Each spot showed about the same amount of time spent in laying and watching before he again traveled further.

Then as I worked along parallel to my companion, who stayed on his tracks, I noticed a strip of thicket to my right. This later turned out to be the finger of a swamp, which



at the time I did not know. I had the urge to cut through to the other side, but decided to stay within sight of my companion driver, as we were making a silent drive. Having no desire to wander away and foul up the drive, I skirted the thicket.

Then the big moment you always hope for happened without any warning!

Glancing to my right into the thicket, I spotted Mr. Bear, just as he jumped out of his bed, heading for the opposite side of the thicket and a little back ridge.

I was carrying my rifle on my shoulder with the sling. I had very little time to get it to my shoulder, and send a shot after him.

As I ran through the thicket after him, I figured if I see him on that little ridge, I hit him—if I don't see him, I missed. As I broke through the far side, I spotted him going up the side, each jump getting slower. By this time, I spotted good bleeding



in the snow, and realized I had made a hit on my first shot.

Now I was faced with the job of getting that bear off his feet before he got over the top of that ridge, or stand the chance of losing him.

My second shot partially on the run was a miss, and by that time I again was talking to myself. "If you don't make the next one connect, you can say goodbye to that bear." I stopped and picked an opening and waited. As he hit the opening I put a 220 grain slug through his front shoulders. That did the job as he came rolling down the side of the ridge.

There he lay, my bear, and a dandy! Right then I am sure that I could have been of some value to the government in the guided missile department because I felt just about ready to be launched off the side of the mountain.

I stood there dry mouthed, trembling with awesome admiration, as I bent over and rolled him on his back. I felt like yelling and dancing—my bear! Son-of-a-gun what a wonderful feeling!

I let out a yell that they must have heard in Laporte, and finally got an answer from my driving companion. By the time he got up to me, I had dressed the bear. Standing there with a pretentious air of nonchalance, I tried to look like an old veteran, to whom this was just another bear. But I am sure that "Worth" in his sixty odd years knew damn well that I wasn't kidding no-one.

I worked that bear off the Dutch mountain all by myself, with only my rifle sling to do it. Man, I would have carried him out hair by hair if necessary. The way I felt, I believe I could have dragged him if he had weighed five hundred pounds!

What a celebrity you are if you kill a bear—everyone stops to see him. Asking you where you shot him, how many shots, and what rifle you were using, etc. You lap it up, taking

all the glory with a feeling of drowsy satisfaction. You have had it brother, you have shot your bear. It is a nice bear, and everyone envies your luck.

Now I am sure that no Alaskan Kodiak, no matter how big, could give me more of a thrill than that bear did! Score again for good old Pennsylvania.

The Gods kept on smiling on this Dutchman as the buck season opened. By the third day, I had my tag on a nice fat spike buck of ninety pounds dressed. We finished the week's hunt with a score of five buck, for the eight hunters in our camp. This, of course, again took place in good old Sullivan County.

The entire summer of 1957 I practiced hard and faithful with my 55 lb. bow, determined to become skillful enough to hit at distances up to 50 yards without fail. I put a lot of concentration on practicing snap shots, without too much time for holding and aiming. Past years of experience had taught me that most buck do not give you too much time to get that shot off. In fact, I have not shot a standing deer since my buck of 1942, plus the fact that every doe I have killed in special seasons were all running shots. I prepared myself for the same as far as archery season was concerned.

As the month of October arrived, three of us and our wives left for Forksville, that's right, in Sullivan County, and settled in our rented cabin for a week of bow hunting.

We had plenty of action the first three days. I shot at, and missed a total of fourteen deer, of which four were standing. The rest were running shots, and none were closer than fifty yards. I was not disgusted by any means, but having a fine time with lots of action. I still waited for a shot within closer range. One where I would have a chance to be ready, instead of a snap shot at a running deer.

Then on Thursday afternoon, I

decided to hunt the Randall clearing on the mine ridge, directly over Forksville. My two hunting companions agreed to this area for the afternoon hunt.

The tree I decided to get into was completely bare of any foliage. With a good thick branch almost parallel with the ground about eight feet above, I got on my roost. Standing upright and leaning against the main trunk, I found this position was quite comfortable. Checking to see that I had openings to shoot through the branches, and room to make a draw, I settled down to a watch at about three in the afternoon.

About seven cigarettes and two candy bars later, I noticed a movement at the edge of the timber about a hundred yards away. Then a deer came into view browsing along and working its way in the general direction of the apple tree to my left.

I started sweating this deer, as it browsed along, and ever so slowly came closer and closer. I saw it was a nice doe, and judged her to be about 125 lbs. on the hoof. Finally at about 40 feet she stopped, and standing erect, looked me squarely in the eye.

There was no doubt in my mind that she saw me, and as I stayed motionless staring back at her, I cursed myself for not having taken a higher branch, but my outline against the trunk did not give my body enough definition. She studied me carefully and tried all the tricks to get me to assure her I didn't belong in that tree; such as stomping her forefeet, cocking her head and stretching her nose towards me and sniffing loudly. Then the old trick of stooping for a mouthful of browse and quickly coming up for a look to catch a movement on my part. But I froze with bow in ready position for a fast draw. Comfortable in that position which I was standing, I decided to beat her; with intentions of

trying to put an arrow in her when she turned to go to the apple tree, I waited tensely. The only fear in the back of my mind was that a cough would decide to bother me at that moment.

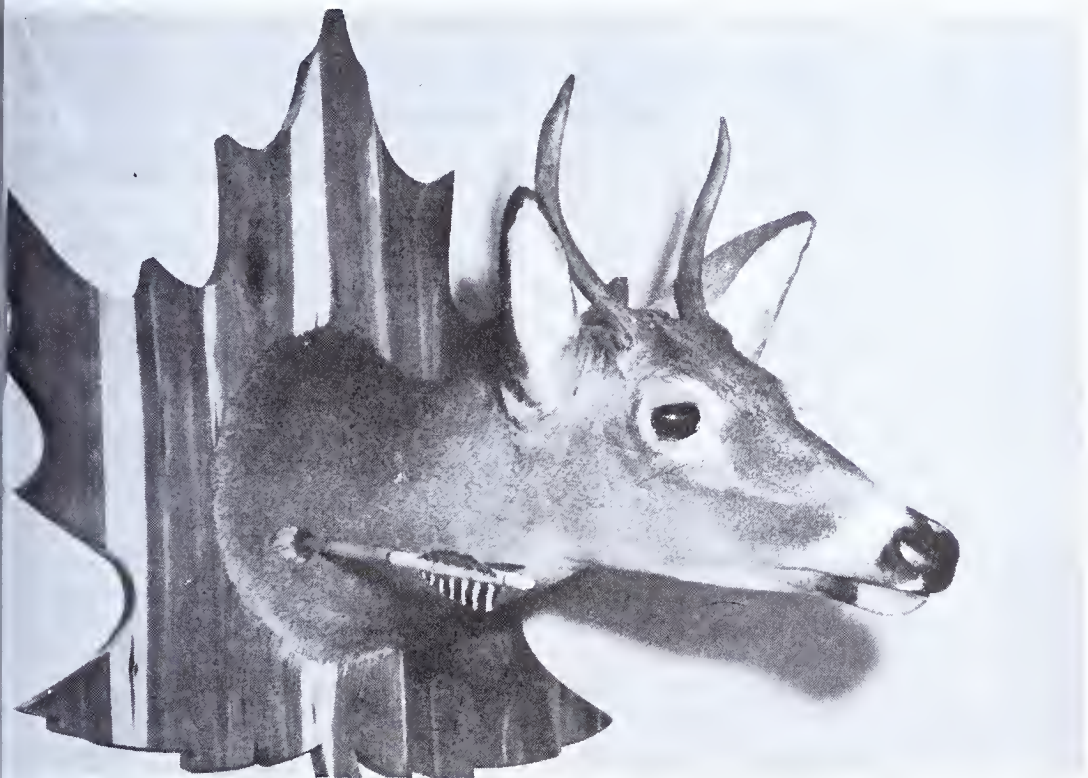
After the agony of a long intent stare on her part, at which time I could actually see the moisture droplets on her nose, she turned. Her feminine intuition satisfied, as her hunger for apples overcame her curiosity, she started stepping daintily towards the apple tree. Another quick glance back over her shoulder as she stooped to pick up an apple.

I brought my bow up slowly, and as I got ready to draw, I saw a movement out of the corner of my eye. Turning my eyes to the direction of this movement, I saw a second deer approaching practically in her footsteps. As I watched my chance, I turned my head at the moment that the doe was down feeding. Checking this second deer while still at a safe distance; It bent its head to nip some browse and I saw the horns. A nice fat spike buck, sleek and gray, he lifted his head and stepped closer. Right there I decided to try for him, rather than shoot the doe.

He stepped up to the very same spot she had stopped at and gave me a stare that brought goose bumps sprouting. I actually was afraid to blink! Out of the corner of my eye, I noticed the doe had her head up, alert as she watched the buck.

They both knew something was just not quite according to their book of Hoyle. I realized that it would be a matter of seconds before they would decide to get out of there fast.

It seemed at that moment that time actually stood still. I concentrated on the buck, returning his stare, every muscle tensed, every sense I could command alerted. Ready to draw and release my arrow quickly, I was sure that this buck would not take me for granted as the doe had. But at the same time,



I had to wait for him to turn his head, before I could make my draw, to avoid his seeing any movement on my part. He was getting nervous as he stomped first one, then the other forefoot.

As he turned quickly towards the doe, I had my chance. As I made my draw, he bunched for his first jump, and as the arrow left my bow aimed for his front shoulders, he already had started in motion of his first leap. With a sharp crack, my arrow hit him.

What royal bull elk could possibly give any hunter a greater thrill than the trying moments in that tree! Staring that buck in the eye, remaining motionless, as your mind raced along at a dizzy rate of speed. Talking to yourself mentally, curbing your tendency to move until the right moment; then the release of your arrow and the crack as it hits. Seeing your buck practically driven to the ground from the impact of your arrow. Watching him run off with your shaft in him; knowing in your mind he is fatally wounded and dark-

ness setting in to prevent your finding him; then the success of finding him the next morning by using every possible skill you possess in tracking plus the help of real hunting companions. I cannot imagine that any elk or bull moose has any more to offer. Score again for good old Pennsylvania and Sullivan County.

My past years of hunting both good and bad, as far as game in the pot, have influenced me into taking the following optimistic point of view.

I am inclined to believe that hunting cannot remain enjoyable if lady luck is constantly perched on your shoulder. I do not envy the hunter who gets his buck every year. For I am sure he cannot possibly appreciate his kills with as much enthusiasm as the man who puts a season or two between kills.

I have put many seasons under my belt that were a failure from a standpoint of getting my game, but before I left camp for home, I already in my mind thought—well, next year, maybe!

I cannot begin to believe that the



hunter who is lucky every year to get his buck the first day, can find time to appreciate the beauty of the forest in which he hunts. Nor can he chuckle at the antics of the squirrel or the chipmunk. Breathe deep the scented air of the hemlock thicket, or detect the fresh smell of musk on a rainy day, where some deer has just passed through. He is too busy shooting and packing his deer to his car or camp. Nine times out of ten he won't get back into the woods after that lucky first day. He has no idea of the things he is missing, that the not-so-lucky hunter experiences. For example, after three days of hard hunting, you decide to coast for a few hours. You pick a nice sunny spot with a comfortable back rest, where you can watch a good trail. Soon you are completely relaxed, and invariably enjoy a good little nap. Far better medicine in most cases than any prescription.

The companionship of your hunting buddies while hunting is an asset too many of us take for granted. Just stop to think, if everyone in your camp were one of those lucky hunters and all got their deer the first day, you would spend the rest of your

hunting trip in the woods alone, unless you were the type camp that drives for their deer. In that case, you would be the only stander, and the rest would have to drive the entire day; this, of course, would soon fizzle out. Come each morning, as the days passed, more and more the lucky hunters would decide to sleep a little longer. Finally, you would be sitting at the breakfast table alone, and leave before daylight for your stand, all alone! Believe me, hunting alone is far less enjoyable than having the pleasant company of a friend of many hunting years association. Let alone, getting a deer by yourself with no one to help you pack him out or to spend those memorable moments without someone to tell of the misses you just had at a nice buck.

Regardless of how fortunate I happen to be in the future, for any possible hunting trips away from home, I can never expect to find as many pleasant experiences as hunting here in my native state has given me in the past. My trophies were not many, but what few I collected were big. All of them were Keystone size!

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### PENN'S WOODS WEST

A new book which promises to become a classic in the field of outdoor literature has been published by the University of Pittsburgh Press. "Penn's Woods West" by Edwin L. Peterson tells of the forests and fields, rivers and mountains of Western Pennsylvania. The author tells of trout streams, wild flowers, boys who pay hookey to go fishing, of frogs and owls that talk in the night. If you like the sound of running waters, or of birds singing in the morning; if you like the smell of campfires or of hemlock groves, you will treasure this magnificent volume.

Woven into the text are 324 photographs, with seasonal section headings and dust jacket in full color. The book may be ordered from local book stores or direct from the publisher: University of Pittsburgh Press, 3307 Cathedral of Learning, Pittsburgh 13, Pa. Price: \$15.00.



# FIELD NOTES



## Eh?

**CAMBRIA COUNTY**—During the night patrol the evening of October 31, 1958, Deputy Stinson and I observed a teenager along country road carrying something under his arm. Upon stopping and talking with youth we found it was a B. B. gun. I asked reason for the gun. He replied protection from the wild cats that were reported around there. I asked his name, he said *Watt*, but I thought he said *What*, so I asked him again, he replied *Watt*. I told him to spell it; he did. *WATT*.—Game Protector James Burns, Jr., Ebensburg.

## Whose?

**FRANKLIN COUNTY**—After observing an archer and three deer in an open field about 50 minutes after the legal shooting time I finally chased the deer by approaching the archer. I began the conversation which followed by saying "It looks to me like you are after hours." The archer replied "Gee, mister, I didn't know whose they were."—Game Protector Edward W. Campbell, Fort Loudon.

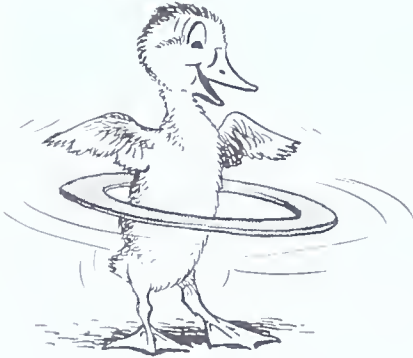


## Never Say Die

**MERCER COUNTY**—This story was related to me by Mr. Saye of Greenville, R. D. On the second morning of small game season this year he shot a ringneck on his way to work and didn't kill it dead. So he chased it down, struck it on the head and put it in the trunk of his car. When he got to work he opened the trunk to show the bird to his buddies and there it stood looking him in the eye. Mr. Saye reached in to get the bird and it jumped, leaving him with only a tail hold. The feathers pulled out and away the bird flew into the woods. Some other hunter may bag a tailless bird with two lives.—Game Protector Arden D. Fichtner, Greenville.

## Full House

**SOMERSET COUNTY**—While attending the Somerset County Conservation League Banquet at a Church near Somerset, an incident occurred which discloses the various occupations members of sportsmen organizations may have. An attorney acting as toastmaster, interrupted a speech by Judge Lansbury of the Somerset County Courts to announce that an auto bearing a certain registration number was afire. Several minutes later he again interrupted to announce that a member of the State Legislature was wanted outside. Later it was disclosed that members of the Fire Company present at the Banquet had extinguished the fire, the Legislator who also represents an insurance company had settled the claim, all within a matter of five minutes.—Conservation Information Assistant, W. J. Brion, Ligonier.



Canned Duck

#### NORTHUMBERLAND COUNTY

—On the first day of the duck season Mr. Ben Yarworth of Shamokin shot a black duck near Dalmatia which a deputy, Jack Snyder retrieved for him. I saw Mr. Snyder bring the duck across a small island and as he approached I noticed something different about the duck. I asked him what the red was on the breast. Upon examination we found that a mason jar ring was about the duck's neck and almost concealed by the breast feathers. We wondered if maybe in its "youth" the duck might have thought it was a life preserver or maybe it got "canned" one night.

Mr. Claude Clayberger, a cooperator on F.G.P. #122 tells of a losing battle a skunk had with a hornet's nest. Somehow the skunk got tangled up with the nest and Mr. Clayberger said the hornets really went at Mr. Skunk. It was not a pleasant sight to see the skunk swiping at the hornets trying to get rid of them.—Game Protector Clyde E. Laubach, Elysburg.

#### Mean Man

GREENE COUNTY—On October 29, 1958 at approximately 7:00 P.M., I received a call from a Mr. Hamilton residing at Dry Tavern. He asked me to please come to his home as they had found a deer in their field which had been injured and he wanted me to look at it. I went to his home and we went to the barn where the deer was. He said it had

a broken leg and that he had called the veterinary to ask if he would come set the leg. The vet said he would do so if I would grant permission. After close examination of the deer I saw that it had been mauled by dogs and both hind legs were broken. I had to dispose of the deer and by doing this I was immediately pegged as being a brutal Game Protector. This is an example of a thank you job after patrolling all day from 6:00 A.M., missing my evening meal because of picking up two prior deer and getting home at 9:00 P.M.—Game Protector Richard L. Graham, Carmichaels.

#### Smoke Jumper

SOMERSET COUNTY — Prompt action and quick thinking on the part of Deputy Warren Shipley of Confluence probably saved many acres of fine timber and hunting territory. On the afternoon of November 1, 1958, Shipley was on patrol in the vicinity of S.G.L. 111 in Somerset County. He noticed a "haze" rising in a stand of timber just optioned to the Pennsylvania Game Commission for purchase. On investigating he found the start of a brush fire. He immediately phoned my headquarters where I happened to be eating lunch and gave me the information. Then he went to the scene of the fire and prevented its spread the best he could until help arrived. He had stopped the fire just a few feet short of a fine stand of about 20 acres of pines which will some day be the property of the Pennsylvania Game Commission; thus avoiding a horrible mishap just adjacent to S.G.L. 111. Deputy Shipley certainly deserves the thanks of all the hunters that use these facilities. Upon investigation I discovered that some "Hunter" had tried to smoke a squirrel out of a hollow chestnut snag thus starting the fire.—Game Protector Eugene F. Utech, Confluence.



## Sorry Ending

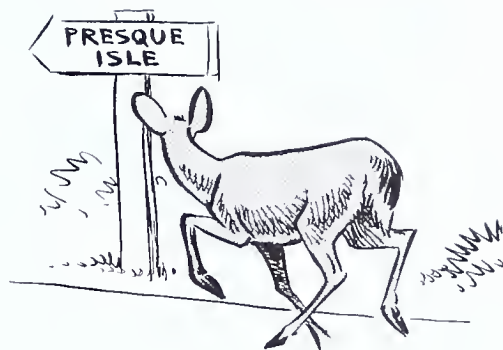
**BUTLER COUNTY**—Two young lads thirteen and fourteen years of age had a black day this year. They took off hunting by themselves not far from their homes and came across a hen pheasant which flushed and in the shooting that followed the youngest received a pellet in the eye. Final results, four Game Law violations, a dead ringneck hen, and a young boy with only one eye.—Game Protector Paul R. Miller, Butler.

## Barefoot Boy With Stamina

**LANCASTER COUNTY**—The Amish are a hardy lot as witnessed by the fact that while patrolling the first day of the season one of my deputies, Carl Nichols, saw an Amishman and his son hunting in their bare feet. It was quite cold the first morning and I'm sure that I would not have wanted to be going barefooted.

As it is quite often the case, the boys with good dogs are killing game while the other boys are griping. I believe that it is especially bad because of the great amount of cover that we have this year. There is more standing corn at this time than I have ever seen before. The birds are surely hard to raise.—Game Protector J. P. Eicholtz, Strasburg.

*ACH, VE DON'T HUNT IN  
DER BLACKBERRIES*



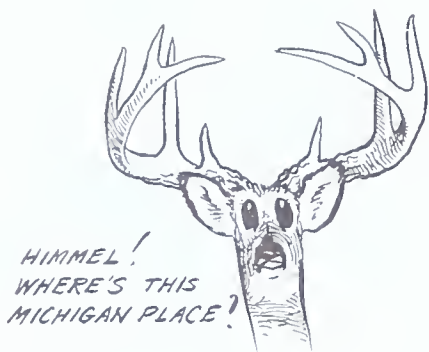
## Homing Instinct

**ERIE COUNTY**—On October 8, 1958 one of my deputies picked up a highway killed deer on Rt. 955, one mile east of Lawrence Park. Upon examination of the deer we noted that the doe deer was ear tagged, tag #985. Upon checking my files I quickly ascertained that this deer was one which I had trapped off Presque Isle and released on S.G.L. #167 a few miles east of Wattsburg in January 1958. This deer was killed on the highway approximately eighteen miles from the point where she was released. Evidently she considered Presque Isle her home and was making every effort to get back there.—Game Protector Roger Wolz, Erie.

## Delayed Action

**FULTON COUNTY**—I have been at loss to explain the poor game food crop we have this year, considering the nearly ideal growing season that we have had this spring and summer in southcentral Pennsylvania.

An old timer came up with the most logical explanation I have heard. He stated that game food is always poor the year following a drought summer. He stated that the fruit bud for the following year forms during late summer and early fall. This would apply to our area. Last summer many of the trees in shallow soil were killed out during the late summer drought.—Game Protector Carl Jarrett, McConnellsburg.



### Food Plus Cover Equals Michigan Buck

BERKS COUNTY—It is always rather amusing to hear the deer hunters talk about the beautiful racks on the Michigan deer. We never will be able to convince some hunters that nice racks and heavy deer still thrive where there is an abundance of ideal food. Some of the deer that have been killed in our Division during the past month are real record breakers. The 8 point buck that we picked up at Bally on the first day of small-game season, had a wonderful rack and a very well proportioned body. Seems to me that all you need to produce a Michigan buck is some corn and alfalfa.—Land Mgt. Asst. Roy W. Trexler, Reading.

### With Arrow In Hand

BUTLER COUNTY—During the recent archery season in Butler County, this particular archer had not seen any deer at all. Upon coming onto a field he spied another archer standing there. He walked up to him and asked him if he had seen anything. The fellow said he was looking for a buck, and if he wanted a shot at a doe there was one standing very near and pointed to it for our hero. Whereupon the Mighty Nimrod took one look, his jaw dropped, also his bow dropped, and he took a single arrow in his hand and started off full speed in immediate pursuit of the doe. When last

seen he had called back for the third time to his brother archer, who was having a good laugh, "She's slowing down" . . . "She's slowing down."—Student Officer Robert Shaffer.

### Dry Run

DELAWARE COUNTY—While hunting deer in archery season in Marple Township, Delaware County George P. Buchser of Newtown Square had the good fortune to get within close range of a buck and two does. Naturally, he shot his first arrow at the buck but due to his excitement he shot a little low and the arrow passed harmlessly through the buck's legs. One doe and the buck darted away but the other doe ran a little closer and stopped facing Buchser. While keeping his eye on the doe, Buchser reached over his shoulder and pulled another arrow from his quiver. His aim this time was for the chest of the deer which was still facing him. Just as he released the arrow, the deer crouched and instead of hitting the chosen mark, the arrow hit her right between the eyes, and much to the surprise of the archer, fell to the ground not harming the deer which sped off. Upon retrieving the arrow, Buchser discovered the point was missing. When he couldn't find it on the ground, he decided to look in the quiver. Yep! That's where it was. At least he had a good story to tell.—Game Protector Daniel S. McPeck Jr., Matamoras.

AND YOU ALWAYS CALLED  
ME HARD-HEADED!



# Deer Hunting in the Years of 1888 to 1902

## PART II

By William Anneman

In this vast wilderness we explored new territory each day, and soon knew it for miles around. Deer were increasing as we observed each new trip. There were no hunting camps and only a few places that one could stay. Snowshoe hares were plentiful. In a day's travel it was not unusual to see a dozen or more humped up by a stump, tree or rock. We shot an occasional one, but found them poor eating. Cotton-tails were scarce. The many foxes and bob-cats no doubt kept them thinned down. Grouse were seen everywhere. Bears were not plentiful.

One morning I got a shot at a buck, but did not stop him. Steve took the track in the diminishing snow while other members surrounded on watch. We lost all communication with Steve and was concerned about him. Upon his return he told us the following story. He saw blood as he persistently worked his way along the trail in spotty snow and bare ground. Evening came on soon. He then realized that he had lost all sense of direction in his pre-occupation of trailing. As night began to fall I had decided to give up, when I heard a shot in front of me. I hastened to the spot of the shot and saw a man looking at the deer. Upon informing him that I had been trailing it after it had been wounded earlier in the day, the old man said: "Well the deer could hardly



get up this bank, so I shot it. It sure is your deer. The two of them dressed the deer and pulled it back into the forests a short distance and hung it high. The old man asked Steve where he was from and where he was staying. I live just two miles beyond and I know a short cut, said the old man.

We were arranging a searching party when in came Steve and the old man. I have brought an old deer (deer) back with me. He tells us the story. So we insisted that the old fellow stay with us for the night. He and Steve were like two kids that had returned from a circus. Steve was 74 and the old man was 73. Their early experiences entertained us all evening.

Next morning Steve and Bill went out to bring in the deer, after first offering to drive the old man home. He rejected, saying shucks fellows, I am going to hunt back, maybe I will kill a deer on the way back. We offered him half of the deer, if he would wait until it was brought in, but he would not think of it, saying I will get one before winter sets in.

One afternoon the old dog started a deer. It took off toward the Bloom-

ing Grove Club. We followed it up to their boundary line. A shot was heard and the dog quit tonguing. We judged the shot to be near the club house. A sizable lake known as Lake Giles, lays in front of the club house. When chased by dogs deer did not hesitate to take for these lakes. The old dog did not return, so Levi was mad and up in arms, and determined to go in and see about it the following morning. He started. I did not want him to go alone, so I joined him. Bill and Tony advised us not to go, saying we would be arrested, or perhaps shot. These people feared the club members also their guides. We took the chance, however, and followed the road around. When we got there we were met by a lot of the members and guides, who came at us like a swarm of bees, hollering all kinds of questions. How did you get in here and where did you come from, etc., and couldn't we read the signs, which forbid trespassing and hunting. Meanwhile we had no chance to say a word. Finally Levi, who was a quick tempered cuss, spoke up, saying first, we are not hunting only for one thing, and that is my dog. Our guns were broke, showing no shells. All this while old Sailor was raising Cain in a closed kennel. One of the party started to get hot, hollering, get to hell out of here or we will run you both in. Levi said: "When you release my dog we will go and not before." That is my dog that is making the racket. This did not have any affect, so Levi walks over to the kennel, loading up with two buckshot shells and a 45-70 cartridge. He commanded: "Open up that kennel or I will blow the lock off." They realized by now that they were not dealing with the humble natives. The superintendent directed a man to unlock the kennel. Old Sailor jumped all over Levi. The man that was so hot said: "Well I guess the dog is yours." Levi replied: "And from now on leave him alone. If you fellows want to get mean, remember



you have dogs." That ended our trouble with the club.

On our return we killed a few grouse. Steve and Dick ran into us, and agreed that we should hunt the Gooseneck region. Levi cut the dog loose after we were properly stationed. Soon the dog gave tongue quick and sharp. Three deer came out to Dick. He killed a nice fork buck. That night it snowed about four inches and made fine tracking. We split our party. Levi, Dick, Steve and I found tracks soon after we started. Dick and Levi took after them. Steve and I crossed the valley road. We found two tracks traveling together. Steve said one was a buck. We followed them for a half mile before they parted. Just right, said Steve, we will hang this one up before night. It was remarkable the way Steve read a deer's intentions. Their conduct seemed to him an open book. We kept after the deer until Steve motioned to me to come over where he was standing. I had been trying to head off the deer, but each time he got by before I got ahead of him. Steve did not speak above a whisper. Do you know where we came off of Mud Pond Ridge last week, where there was a draw and we ate our lunch? There is an out-cropping ledge on the opposite side. This deer is making signs of wanting to take a rest. Make a wide detour and go there. Stand near the top, so that you can see well. I will give you thirty minutes. He should lie down between here and there. I started out and made the stand in about the allotted time. I was there only about three or four minutes. Upon looking over toward the ledge, there was a deer. How he knew I had seen him was beyond me. He gave a great leap down the gully. I shot quick and he went out of sight. I was sure of a hit and hurried to the spot, but saw no signs. Then whang from below. The deer had run into Steve, who shot him in the neck. This one was a fine big buck with seven points. My shot



had been a fatal one. I had caught him in the back. The bullet had passed on down through the lungs. He could have not gone far. Steve only smiled and said: "If you keep after one, he is sure to make a mistake in time." That was deer hunting in those days. One could often exploit his woods lore and knowledge of deer to its fullest capacity.

Dick and Levi both had shots at deer, but did not connect on that trip. By this period of our experiences we found deer everywhere we hunted in our region. They were increasing fast.

After supper Steve told of some experiences earlier in life. He and Old Russ had a lumber camp on Cobb Mountain in Lackawanna County. They had put up a shack near the Old Drinker Turnpike, where they lived mostly off the woods. Roaring Brook had plenty of brook trout and there were enough grouse and squirrels for them to feed upon them when wanted. One winter day they were chopping near the top of the mountain when the day turned bitterly cold. Russ said: "let's quit, I can't hardly hold my axe handle anymore. Steve agreed. They started down the mountain and ran onto a deer track, much to their surprise, for none had been seen before. They always took a gun with them, so Steve

took the gun and Russ pulled for the shack. Steve took after the deer full speed, never having followed one so rapidly, before. Even then, he said, I thought I would freeze. It became dark. I could not follow the trail any further. I hiked to the road and then ran all the way to the shack. Russ had a good fire and supper waiting. Sometimes I think I have not gotten thawed to this day. Next morning I took the track again and followed it all day. Just before dark I got a shot in thick scrub oak, but was not sure that I had made a hit. It was still cold, but not so severe as the day before. When I returned Russ started to rag me. That only made me more determined to get that deer. I started again next morning. I looked where I had shot the evening before and found a little hair, but the deer showed no signs of being hit. It had turned down the mountain toward the shack. When I came near the shack, there laid my deer. At that time I did not believe that there was a deer in the whole of Lackawanna or Luzerne Counties.

The next season found us together again minus the dog, for the authorities were putting the ban on the dog to hunt deer. Steve and I were pleased about it. Levi was of a different mind, but we did not argue over it. Steve said: "It will not be long now until they will forbid the killing of does, and this came to pass not long afterwards. We were soon restricted to antlers two inches above the hair. Shaving kits became popular then.

It was not long thereafter that the vast wilderness areas spoken of in this story became rapidly occupied by hunting camps. It was a popular deer hunting range. The food and cover was ideally in its best, as the lumber cutting had passed on. New roads were penetrating everywhere.

We came to the days of our last hunt together on new ground. Steve was slowing up, due to rheumatism. Dick was going to get married and

Levi had decided to hunt for bears in Lycoming County, where he could use his dogs. That left me without my old hunting companions. Our last hunt together netted us two fine deer; one would go at least 170 lbs. Our last day we hunted Bald Hill and the region known as the Meadows. A bunch of deer were sighted and hunted, but they kept slipping through our stands, and we wound up at camp before dark. We had planned on leaving next morning, but subsequent events quickly changed our plans. When we arrived within short distance of camp, we saw that something out of the ordinary had happened. The old couple came toward us all excited, waving their arms and shouting about what had happened. About this time Bill and Tony came home and we got the story.

A buck deer had come upon the scene about a half hour before our arrival. It stumbled into the yard, acting queer, and then on into the chicken yard, tearing down the wire and falling over the woodpile, where the old man had been chopping wood. The deer fell, but the old man was too confused to take advantage of the situation and kill the deer. The deer got up and made it to the field, the old lady with a club and the old man with an axe. The deer was trying to get over a fence of large rocks and stones of various sizes. This fence was a monument of the old couples struggle to clear the land for a home. The deer appeared too weak to make it over readily, but finally did make it over after the old man had made several passes at it with the axe and the old lady had whacked it with the club. It fell into the low scrub brush on the other side. At this stage of the struggle the old man and lady were exhausted and gave up.

It was too late to follow the deer that night. All hands agreed that we would likely find the deer dead next morning; excepting that Steve said



we may never find that deer. All depends on where he has been hit. From what I hear, a head shot of some kind has staggered this deer. There were no blood signs anywhere with the tracks. Next morning we were up early. Where the deer had stumbled over the wall a lot of blood signs were found. The deer had not laid down anywhere. As we followed on blood signs guided as to note that they hung high on the brush, Convincing that Steve was right again. The deer was hit in the head somewhere. Steve said boys I am going back, you can keep right on following him if you want to. We had covered at least two miles. As we followed along it was observed that the deer would walk around every obstacle that he came to, rather than to jump over it. He had not tried to run or back track, but kept going straight ahead. The deer headed directly toward the Blooming Grove Creek, and that is where we lost him. We searched both sides of the creek for a half mile or more and could not find where he came out. It was now four o'clock and we were eight miles from camp. We took to the road to camp, although it was further to camp. Not much was said on the way back other than to remark about the wonderful stamina and craft of that wounded deer.

Further talks with the folks at camp described the deer as a monster, much larger than the nice one we had hanging at camp, which would go about 175 lbs. and had a nice rack. I have never forgotten that deer. In

my memory it was a grand defeat and a grand finish for that deer and our hunt. We left next day, never to see our good host, as we said Good Bye. Several years later I returned to this locality, but the old folks had passed on. The young daughters were married and Tony and Bill had drifted to the city. The place was sold and the new tenant kept hunters during the hunting season.

The sport of hunting has never been the same to me since. I have passed by many highlights in this narrative, but have tried to present a picture to those who may choose to read about that which we, in our prime days, considered the ideal of deer hunting.

Since these days of my great hunts in Pike County I broadened my field to reach into Monroe, Wayne, Lackawanna and Luzerne Counties, for the deer had increased to nicely populate these regions, where, when I was a novice at the hunt, there were no known deer worthy of a hunt. Also I spent two seasons in Sullivan and Lycoming Counties, hunting bears with my old friend and hunting companion Levi, who liked to hunt with dogs. In the two seasons that I hunted there I saw but one deer track. Bears were quite plentiful.

All the members of my old hunting party have passed on. I hope they have found the hunting in the Promised Land like we found it away back between 1888 and 1902. I remain as the sole survivor in my eighty-ninth year.



the  
Pennsylvania  
**GAME LAW....** and  
**YOU**

Let's take a look at the different types of permits.

attainment in ornithology

Deputy Attorney General

1. *Journal of Management Studies*, 1997, 34, 1, 1-15.

**T**HAT dirt-cheap hunting license you buy every fall gives you just about everything—a ticket of admission to the world's finest shooting on millions of acres containing wild game. It's all the average fellow needs, and in Pennsylvania it's good for every kind of game that walks or flies, from the largest to the smallest. Yet the hunting license is only one of a number of licenses (or permits, as the Legislature calls them) which the Game Commission is authorized to grant. They deal with just about everything connected with hunting and game management.

Taxidermy permits are another important item. Few hunters realize, when they take that trophy in to be mounted, that the law and the Game Commission protect them against incompetence. The law requires taxidermy permits to be held by the person mounting the trophy.



dermists to serve a minimum of four months apprenticeship under the supervision of a museum of recognized standing or of a qualified and licensed taxidermist. It provides for a system of examinations by the Commission to determine the fitness of applicants after they have served this apprenticeship.

Permits are issued to fur dealers, or their authorized employees operating from their established place of business, purchasing or receiving raw furs for commercial purposes.

Another type of permit is issued to persons desiring to propagate game for commercial purposes.

Operators of regulated shooting grounds must have permits.

There are even a few permits issued to persons possessing, propagating or selling ferrets or fitches.

Propagators of fur-bearing animals for commercial purposes (fur farms) are required to have a permit.

And so are persons operating roadside menageries "for the purpose of exhibition or attracting trade."

There are also special types of miscellaneous permit. For instance, a disabled veteran may be permitted to hunt from an automobile if his disability is serious enough to meet specified requirements. And the Commission is given wide-open authority to issue "such other permits, with or without charge, as it may find essential to control the taking or possession of wild birds or wild animals, or any part thereof."

The Legislature has spelled out definite limitations upon the various permits it authorized the Game Commission to issue. Thus a collector's permit entitles the holder to only so many specimens, nests or eggs, and none may be shipped out of the State without permission of the Commission's executive director. Taxidermists are permitted to mount only specimens which have been legally taken. Game propagators are required to give the Game Commission first

refusal of live game that is to be shipped out of the State. When shipping they are required to tag each dead bird or animal, and each crate of live birds or animals.

Regulated shooting grounds in particular are the subject of quite extensive legislative regulation. They must release at least 100 birds a year. They must have a minimum of 100 acres. Their boundaries must be marked by a single wire strand, with printed notices not more than one hundred yards apart. The kill is limited to 75 percent of the birds released except in the case of ducks, where a 90 percent kill is permitted. On the other hand, there is no sex or bag limit, and the season is longer. Game other than the species released may not be shot if out of season, and a hunting license is required. All birds killed on regulated shooting grounds must be tagged with a Commission tag.

COLLECTORS from accredited museums must obtain a permit before collecting any protected species of wildlife and may not ship specimens, nests or eggs out of the State without prior permission of the Commission's executive director.





Ferret and fitch permits are different from the run of the mill permit, in that persons possessing them must have a permit for each and every animal, not just a general permit for all of them. In addition, a separate fee is required for each.

Fur farms shipping live animals or pelts are required to fill out tags, one of which goes on the container, one is held in the shipper's files for two years, and one is sent to the Game Commission. There is also a provision for marsh owners to obtain fur farm permits for unfenced areas.

Roadside menageries, which exclude theatrical and circus exhibitions or regular zoos, must meet Commission standards for housing and care of the animals and for protection of the public.

Penalties for violation of these permit sections of the law are in most cases twenty-five dollars for each offense. The exceptions are fur trading, \$100 for resident, \$200 for non-resident; failure to send shipping tag duplicate to Game Commission, \$10; regulated shooting ground violations, \$50.

There has not been much judicial interpretation of the special permit sections in the Game Law. Back in 1940 the Montgomery County court released a defendant who had kept an injured raccoon without the required permit, but on the narrow ground that retention of a hurt animal for humanitarian reasons was a "technical" violation and not within the legislative intent. Commonwealth vs. Sacks, 38 D. & C. 566 (1940).

While the basic permits issued by the Game Commission are provided for in Section 401 of the Law, there are others. There is, for instance, a ten dollar permit for a special dog training area (Section 938), a five dollar permit for field trials (Section 720), a fifty dollar permit for fox hunting clubs, Section 722, a ten dollar retriever trial permit, Section 721, and finally, a free permit to ship

trophies out of the State for mounting (Section 712).

The reason for practically all of the special permits provided by the Legislature is quite clear. Without them, enforcement of the game law generally would be even more difficult than it is. Violators caught in possession of illegally killed game would be able to escape penalty by claiming that they had obtained it legally from propagators, shooting grounds, or other legal sources. Without the control which permits and tagging requirements provide it would be impossible for a Game Protector or other officer to prove that the game was illegal. This is particularly true because, without such requirements, the burden is on the accuser to prove that the suspect has violated the law.

The dearth of court cases dealing with the special permit sections of the law appears to indicate that in this respect the law serves a useful purpose and is accepted by the public as a proper exercise of control over the game resources of the Commonwealth. There has been some talk of placing control over fur farms in the Department of Agriculture, but legislation to effect the change has never been seriously considered by the General Assembly.

Most of the special permit situations do not affect the average hunter, but he should be aware of them. They backstop the Commission in its broad-scale effort to protect the game, so that it will be available for him when he wants to shoot. To that extent they are important to the average sportsman as well as to the individuals directly affected. When we look at them all together, they seem to represent a large dosage of regulation, but on analysis it is evident that the regulations themselves serve a useful purpose in keeping the various elements involved in game management under proper control for the benefit of the general public.



# CONSERVATION NEWS



## **Pennsylvania Forestry Association Starts New Educational Program; School Children Invited to Name Raccoon Symbol of Outdoor Manners**

The Pennsylvania Forestry Association, with the cooperation of nine conservation agencies in the Commonwealth, has just announced a new educational program aimed at improving the manners of persons using outdoor recreational facilities. Recognizing the fact that the major problem facing public outdoor recreation today is increasing use on decreasing areas, the Association plans to start its long range project with a contest open to all students enrolled in any grade school within the State. Awards totalling \$1,000 will be granted to winning entries. A "Good Outdoors Manners Raccoon" has been selected as a symbol and the students are being asked to pick a suitable name for the popular game animal.

In a letter early this month to school principals, Lloyd E. Partain, president of the Forestry Association, pointed out that the contest is open to individual students or any organized youth group. A statement of 25 words or less telling why the name was selected must accompany each entry. All entries must be postmarked not later than March 15, 1959.

Each school will receive a poster announcing the contest. All students will be issued a colorful bookmark displaying the raccoon trademark, rules of the contest, list of prize awards, and official entry blank.

When the project was first conceived, it was recognized that there were a number of agencies and organizations which had a direct in-

terest in its educational objective. To date, nine of these organizations have agreed to participate as sponsors—Pennsylvania Agricultural Extension Service, Department of Forests and Waters, Fish Commission, Game Commission, Soil Conservation Service, Federation of Sportsmen's Clubs, State Grange, Izaak Walton League of America, (Pennsylvania Division), and the Garden Club Federation of Pennsylvania.

Need for such a program developed from repeated expressions of concern by many individuals and organizations over the destruction of public property, abuse of privileges at parks and camp sites, indifference of some "recreationists" to the rights of landowners, and the apparent assumption by a growing number of people that the outdoors was theirs to use as they pleased. The Association felt that there was no single program aimed at directing public attention to the need for developing good outdoor behavior. It believes that this over-all approach of teaching people how to live together and receive maximum enjoyment for their leisure hours involves much more than being careful with fire, picking up litter, leaving a clean campsite, or asking permission before entering private property—as important as each of these basic actions are. The "Good Outdoors Manners" program will support and further such established educational programs as Keep America Beautiful, Clean Streams, Don't Be a Litterbug, forest fire prevention, Keep Pennsylvania Green, and others.

## Three Veteran Commission Officers Leave Service; Heffelfinger, Jenkins, Mackey Reach Retirement Age



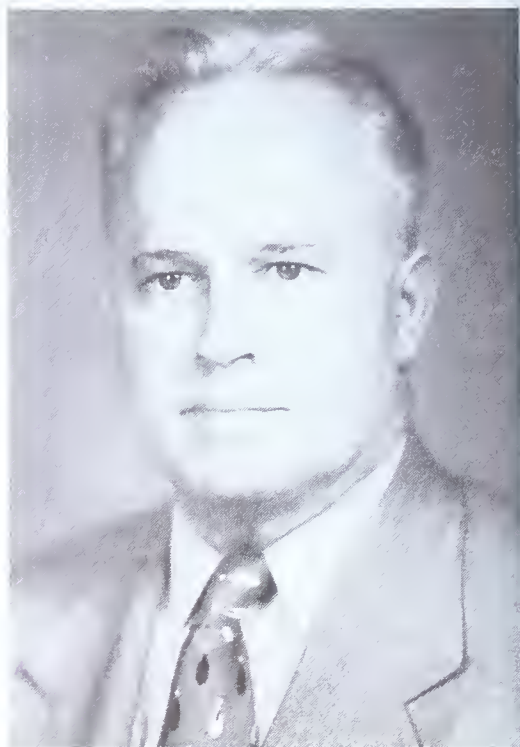
Rollin Heffelfinger

Three of the Game Commission's veteran officers recently reached retirement age of 65 and have left state service. Each has been with the Commission a quarter century or more.

Rollin Heffelfinger, Chief of the Division of Administration, Harrisburg, retired December 31, 1958. He represented the Game Commission since November 11, 1914 when he was first appointed a Special Deputy Game Protector. He served in this capacity until April 1, 1923 when he was placed on the salaried payroll as an Assistant Game Protector and assigned to Monroe, Pike and Wayne Counties. On January 1, 1929 he was promoted to District Game Protector in charge of Wayne County. Again on January 1, 1936 he was promoted to Supervisor of the Commission's Southwest Field Division with headquarters at Irwin. He served in this position until his promotion as Act-



Francis E. Jenkins



L. A. Mackey



ing Chief, Division of Law Enforcement, Harrisburg on September 15, 1945. Since October 16, 1949 Mr. Heffelfinger has served as Chief, Division of Administration in Harrisburg.

Francis E. Jenkins, P-R Area Leader in the Commission's South-central Field Division retired at the same time. He served from August 29, 1924 to September 30, 1931 as a Deputy Game Protector in north-eastern Pennsylvania and was appointed Assistant District Game Protector for Lackawanna County on October 1, 1931. On January 1, 1935 he was promoted to District Game Protector in charge of Lackawanna County. Mr. Jenkins was again promoted on August 1, 1949 to the position of Conservation Information Assistant in the Commission's South-central Field Division with headquarters at Huntingdon, became Land Management Assistant to the Division Supervisor on May 15, 1950 and since August 1, 1956 has served as P-R Area Leader in charge of land management activities involving use of Pittman-Robertson funds.

L. A. Mackey, Senior Draftsman in the Division of Land Management, Harrisburg also retired on January 1st. He was first appointed to the service on October 21, 1924 and had previously been with the Pennsylvania Highway Department from December 29, 1919.

## **LICHTENBERGER APPOINTED ADMINISTRATION CHIEF**

Robert S. Lichtenberger, of Camp Hill, has been promoted by the Game Commission to succeed Rollin Heffelfinger as Chief, Division of Administration. The new administrative officer has had a wide variety of experience in wildlife administration and management work. After completing a forestry course at Pennsylvania State University in 1936, Lichtenberger immediately enrolled in the first student officer class at the Com-



Robert S. Lichtenberger

mission's training school. Following graduation, he was retained on the school staff, serving in this capacity during the training of six more student officer classes as well as numerous in-service training courses for the Commission's field officers. During the period when the school was not operative for training purposes, Lichtenberger helped supervise the Commission's land management programs in the Northeast and Northwest Field Divisions.

Called to the Harrisburg office in 1953, Lichtenberger became coordinator of the Federal Aid Projects in wildlife management. When the Commission acquired the Howard Nursery in Centre County during 1954, he became the Nursery Superintendent. From April 1956 until his appointment to head the Division of Administration, he had been Supervisor, Food and Cover Section, Division of Land Management. With 22 years of service in a wide range of management assignments, Lichtenberger has acquired experience which well qualifies him for his new administrative post.



**BIG GAME BONANZA** was scored during the 1958 seasons by Douglas E. Price, of Canadensis. The 350 pound male bear is one of the biggest ever killed in Monroe County. The 8-point buck weighed 142 pounds hog-dressed.

### **Preliminary Estimate Indicates Hunters Take More Than 350 Bears In 1958 Open Season**

More than 350 legal black bears were bagged by hunters in Pennsylvania during the season that ended November 29, according to Game Protectors' calculations. The official figure, which is based on reports submitted by successful hunters, will not be known until all kill tags have been counted and investigations of unreported kills have been concluded.

The bear population in the Commonwealth has been building up, and it is the view of the Game Commission the harvest of bruins in the last three or four seasons did not crop the increase of the year. These big game animals were still "on the prowl" during the 1958 season, therefore if the wet, cold weather of the decisive first day had not driven the army of hunters from the woodlands

by noontime the bag of bears would easily have been well over the 400 mark, a reasonably high figure for a one-week season in the Keystone State.

The Game Commission again admonishes hunters who bagged a bear to cooperate by sending their kill tag to Harrisburg at once, in compliance with legal requirements. Game Protectors have been directed, as time permits, to trace down every possible unreported bear kill and take action against persons who failed to report.

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### **Wild Turkey Meeting Scheduled**

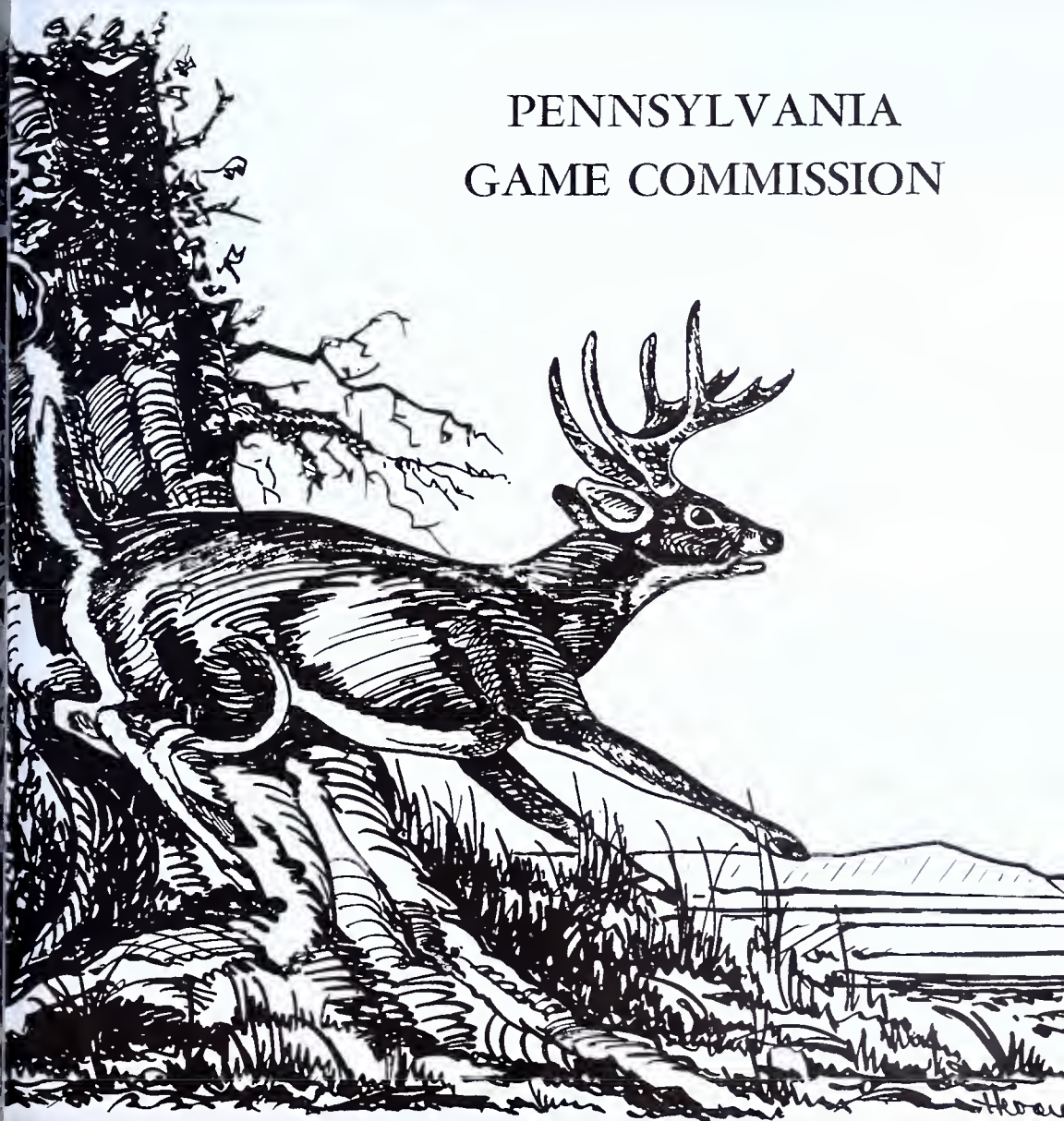
An effort to consolidate information on the biology and present status of the wild turkey and to develop research goals is the objective of the Wild Turkey Management Symposium scheduled February 13-14, 1959, at the Peabody Hotel, Memphis, Tennessee, the Wildlife Management Institute reports.



IN HONOR

25414  
OF FAITHFUL SERVICE

PENNSYLVANIA  
GAME COMMISSION





# PENNSYLVANIA GAME COMMISSION 25 YEAR CLUB



## WILLIAM T. CAMPBELL

Law Enforcement Asst.

Franklin, Pa.

Game Commission Service 25 years

Served as District Game Protector January 2, 1936 to August 1949, when he was promoted to his present position. Deputy Game Protector from October 27, 1932 to January 1, 1933, which included temporary assignments and Acting Game Protector.



## WILLIAM D. DENTON

District Game Protector

Clarion, Pennsylvania

Game Commission Service 25 years

Served as Assistant District Game Protector from December 1, 1935 to April 16, 1936 when he was promoted to Traveling Game Protector. Promoted to present position August 16, 1936. Deputy Game Protector July 1, 1931 to October 15, 1935, which included temporary assignments.

# PENNSYLVANIA GAME COMMISSION 25 YEAR CLUB

## JOHN S. DITTMAR

District Game Protector  
Harrisburg, Pennsylvania  
Game Commission Service 25 years  
District Game Protector from date of appointment February 27,  
1933 to present time.



## GEORGE A. DIEFFENDERFER

District Game Protector  
Danville, Pennsylvania  
Game Commission Service 25 years

Student Officer July 2, 1936 and upon graduation March 1, 1937  
was assigned to the position of Traveling Game Protector. Pro-  
moted to present position January 1, 1939. Deputy Game Pro-  
tector October 1, 1930 to July 2, 1936, which included tem-  
porary assignments.

## CHARL S. GREENWOOD

Chief, Division of Propagation  
Harrisburg, Pennsylvania  
Game Commission Service 25 years

Acting Superintendent, Loyalsock Game Farm October 1, 1933  
until November 1, 1933 when he was promoted to Superin-  
tendent. Acting Chief, Division of Propagation May 1, 1945 to  
April 1, 1946 when he was promoted to his present position.



# PENNSYLVANIA GAME COMMISSION 25 YEAR CLUB



**M. J. GOLDEN**

Executive Director  
Harrisburg, Pa.  
Game Commission Service 25 years

Served as Assistant District Game Protector from December 1935 to April 16, 1936 when he was promoted to Traveling Game Protector. Promoted to District Game Protector March 9, 1937. Acting Field Division Supervisor March 9, 1940 to August 9, 1940 when he was promoted to Field Division Supervisor. Promoted to Supervisor, Farm-Game Cooperative, with headquarters at Harrisburg, September 16, 1949. Promoted to Deputy Executive Director December 16, 1956, which position he held until promoted to his present position January 1, 1958. From Doctor Bennett's death September 12, 1957 until January 6, 1958 he served as Acting Executive Director. In addition to the above, he had service as a Deputy Game Protector from August 6, 1929 to December 15, 1935 which included temporary assignments.



**MARK L. HAGENBUCH**

District Game Protector  
Bloomsburg, Pennsylvania  
Game Commission Service 25 years

Served as Assistant District Game Protector from July 1, 1933 to May 1, 1934 when he was promoted to Traveling Game Protector. Promoted to District Game Protector Jan. 1, 1939 and served in this capacity to date of retirement July 11, 1958.



# PENNSYLVANIA GAME COMMISSION 25 YEAR CLUB

## CHARLES PFEIFFER

ot., Loyalsock Game Farm  
D. No. 2, Montoursville, Pa.  
me Commission Service 25 years

erved as Assistant Game Propagator July 16, 1936 to September 1937 when he was promoted to Assistant Superintendent. Promoted to present position April 1, 1946. Prior service included full-time hourly employment as a Propagator from October 28, 1933 to July 16, 1936.



## CARL C. STAINBROOK

Field Division Supervisor  
Forty Fort, Pennsylvania  
Game Commission Service 25 years

Served as District Game Protector from June 20, 1933 to April 1, 1947 when he was promoted to General Operations Assistant. Promoted to present position August 1, 1949.

## MORRIS D. STEWART

Field Division Supervisor  
Reading, Pennsylvania  
Game Commission Service 25 years

Served as Game Refuge Keeper from April 15, 1936 to March 1937, when he was promoted to District Game Protector. Promoted to General Operations Assistant April 16, 1947. Promoted to present position August 1, 1949. Deputy Game Protector October 20, 1932 to April 14, 1936 which included temporary assignments.





## OUTDOOR FUN WITH A FUTURE



### Outdoors In Winter

By Ted S. Pettit

**W**INTER may be the most uncomfortable season of the year to take trips afield, but it can also be the most rewarding. With leaves gone from trees and shrubs, it is easier to see what wildlife is around as well as signs such as old nests or dens. Then, too, birds and mammals are more concentrated. There is less cover and food available, but where there is food near cover it is easier to find and observe animals. Tracks and signs of feeding are easier to find too.

The first thing to find out about animals is how they spend the winter. They do it in several ways.

Many of them spend it in hibernation. All the reptiles and amphibians—snakes, turtles, salamanders, frogs and toads are completely inactive during the cold weather. They hole up in burrows in the ground, under rocks, in caves or in the mud on the bottom of ponds and their life processes slow down until the weather warms up again. Some mammals, too, such as wood chucks go into a deep winter sleep in a nest or den that has been prepared for winter. Others such as bears may sleep during the coldest weather but a warm period may see them stir around. Still other mammals store up food during the fall, on which they feed when snow or ice cover the ground. They may be inactive during the coldest weather, but will move around and seek food

during warm periods and when their stock supply gives out.

Many mammals, though, are active all winter feeding continuously to keep up their body heat to fight cold weather. Deer, both cottontails and snowshoes, squirrels, mink, otter and others are up and about all winter. They seek shelter in protected areas when snow is deep and the cold winds blow, but they must feed every day to stay alive.

Birds are a different story. Some, such as the warblers, thrushes, vireos, orioles and tanagers leave Pennsylvania and migrate far to the south. A few individuals may remain in a good food patch, but most of them move away. Birds such as chickadees, titmice, nuthatches and downy or hairy woodpeckers may move south a ways or they may stay around all winter. These same species from a little further north may move in to spend the winter.

Blackbirds—grackles, red wings and cowbirds—gather in flocks and spend each night in a protected roost. During the day they spread out over the surrounding countryside to feed, but each night go back to their roost.

Winter is the time to look for owls, and especially, to find out what owls eat. Screech owls may spend the day in a large hollow tree or even a bird house, and go out at night to look for mice, shrews or rats. Large-eared owls or barn owls find a protected

place in a clump of pines, spruces or cedars and roost during the day to feed at dusk, dawn or after dark.

Look around under clumps of conifers or at the base of hollow trees for owl pellets. These pellets are about the size of your thumb and are the indigestible fur and bones of mice and other small mammals which the bird spits up. Collect these pellets and take them home. Spread out a piece of paper, and using tweezers and a couple of long pins, carefully pick the pellet apart. You'll find bones and skulls of small birds and mammals and know that these animals are present in your area in winter, even though you cannot see them. It is often possible to find the skulls of three or four species of mice, shrews, or rats in owl pellets.

"A Field Guide to Mammals" by William Henry Burt, published by Houghton Mifflin Company, Boston, is a good book to use to help identify small mammal skulls found in this way.

A project of this sort is interesting in several ways. Not only does it show you that owls are in your neighborhood although you may never see them, but it shows, too, something of the feeding habits of these birds, and if you collect enough pellets—several dozen or so—and identify the contents, you can get a general idea of the relative abundance of small mammals.

If you or many of your neighbors have feeding stations for birds, watch for hawks nearby. This unnatural concentration of song birds in back yards or parks many times attracts hawks, which like the songbirds are looking for an easy to get meal.

Sparrow hawks, sharp shinned hawks and Cooper's hawks are often seen in backyards or parks awaiting a chance to swoop down on a feeding

sparrow or jay. At first, they may be successful, but it won't take the songbirds long before they are more wary. After that, all the hawk gets are the sickly birds that probably would die anyway, or those that are too slow getting to cover.

Animal tracks are easy to find in soft snow and much can be learned or observed by following the tracks and "reading the story" they tell. After the first snow of this winter, I spent two days in the woods and saw very few animals. But it wasn't because they were not there. Their tracks were all over the place, but generally were most heavily concentrated around dense cover and near good feeding places. In all, I found tracks of deer, bear, cottontails, snowshoes, grey and red squirrels, raccoons, mink, beaver, chipmunks, deer mice, field mice, porcupines, red fox, grouse and turkeys.

Mainly these tracks indicated that the animals were walking around, undisturbed, trying to find food. But occasionally they told something else. Under one apple tree, it was obvious







that a good sized deer was standing on its hind legs trying to reach some apples. Tracks came in from one side and were concentrated under the lower branches. But something disturbed that animal and it took off with long zig-zag bounds. Across the unbroken snow were tracks to show that deer jumped twelve measured feet from under the tree, then bounded away covering ten feet to the bound, until it reached a stand of spruces. There it stopped and looked back, before walking further into the dense cover. I followed the tracks around and the animal went in a big circle before going back again to the apple tree.

In another place, something startled a grouse. It had been walking along the edge of a pine plantation for a hundred feet or more, stopping here or there to feed on weed seeds that extended above the snow. But something startled it and it took flight, leaving the prints of its wing feathers in the snow.

When streams are frozen and only a few holes remain open, these are excellent places to look for tracks. Mink, raccoon, fox and even turkeys or grouse will visit them and leave tracks in snow or mud along the edge. Small patches of open water in rivers or ponds are good places to look for ducks. Some of the more

spectacular of our waterfowl many times may be seen in these spring holes—wood ducks, hooded mergansers, and others.

Winter is the time, too, to find out what kinds of natural foods animals prefer. This is the time that is the most critical of all for our game species—deer, turkeys, pheasants, quail, grouse or rabbits. Many have a difficult time finding sufficient quantities of the right kinds of food and by following their tracks and by looking for signs of browsing, you can discover what they eat.

Take a good look at hemlock, cedar, red and sugar maples, birches (black, yellow, grey), witch hobble, dogwoods, basswood and apple trees. These are some of the preferred winter food plants of deer and frequently you can see where the animals have browsed the lower branches, eating birds and new growth. If you find signs of browsing on pines, spruces and balsam, deer may be having a hard time finding enough of the food they prefer.

Deer need from four to seven or eight pounds of browse per day, depending upon the nutritional value of the browse. This may not sound like much, but try collecting that much from the plants listed above and you'll discover something of the problem that deer have in the winter.

But before you can do that, you should be able to identify trees and shrubs in winter. Identification of deciduous trees and shrubs is most difficult after the leaves have fallen, for then you have to rely on buds, bark and general growth characteristics. If you can identify trees and shrubs in winter, you can tell them anytime, anywhere.

Most good tree guides help you identify trees and shrubs from only the twigs. One of the best is "Trees of Eastern U. S. and Canada" by William M. Harlow and published by Whittlesey House, New York. This guide shows photos of twigs and describes them in the text.

A good project is to collect twigs as you walk in the woods, concentrating first on those that have been browsed on and on those you do not know. Take them home and identify them using a good tree guide or help from someone who knows.

Then mount the twigs on a piece of cardboard and label them. Refer to this chart frequently, to refresh your memory and to check other twigs you find. Add to it as you find new ones, and soon you will have a helpful device for identifying twigs you find in the woods.

A project that goes right along with twig collection and identification is looking for old birds nest and insect eggs, cocoons or other insect homes.

Old nests are easy to find when leaves are off the trees, and many times you will be amazed at where you find them. They may be right where you hiked, camped, swam, fished or had picnics all summer and you had no idea that a bird had a nest so close by. It's fun to identify these nests and find out what bird made them. But it's more fun to try to find out what they are made of and how the bird put them together.

Some nests will be elaborately woven baskets while others are no more than crude platforms. Some will be made of fine grasses and sedges, lichens, mosses, feathers, down, string and bits of paper. Others are short sticks and twigs assembled crudely and you wonder how they held eggs long enough for them to hatch. Again, being able to

identify twigs will help you discover what some nests are made of.

Another interesting collection is one of natural foods eaten by birds. Look along roadsides, the edges of open fields, tangles along creek bottoms, the edges of conifer plantations, in hedgerows or even in backyard gardens. In winter you can frequently see flocks of juncos, white throated sparrows, cowbirds, tree sparrows, song sparrows, an occasional robin, Myrtle Warbler or bluebird. These birds may feed on common weed seeds such as rag weed or on fruits of honey suckle, rose, cat brier, viburnum or dogwood. Watch the birds carefully and see how many species you see eating one kind of weed seed or fruit. Make a collection of the foods and label each kind with its name and the kinds of birds that eat it.

This project will show two things: First what birds eat in winter and this in turn gives you an idea of what to do if you want to attract more birds; and second that usually you will find the most birds where there is the greater variety of plant life. You usually find more birds along roadsides and woodland edges because in these places there will be more different kinds of plants.

Going outdoors in winter can be real fun with a future. You can see much you cannot see at other times of year and you can find out much about wild animals and how they live. In the process, you can discover for yourself some of the basic principles of wildlife management.







# The Abandoned Den Set For Mink

By Larry J. Kopp

(Photos by the Author)

**M**INKS love to explore mysterious looking places. In fact, a sand bar extending out into a stream or a small island like the one shown here, holds almost as much fascination for a mink as flowers hold for butterflies.

And since these places serve to distract a mink from its normal travel route along the main stream bank, they are ideal locations for making abandoned den sets.

Frequently the trapper may find suitable holes already dug into the soil along the edges, just above the water level. Photo number two, for instance, shows a hole which was excavated by a muskrat apparently digging for roots.

A little work with a trowel is usually necessary to prepare an even

resting place for the trap, which should be set so that only about half of the trap is within the entrance. A mink will merely pause at such holes to peek inside; thus if the trap is set too far inside the entrance it cannot serve its purpose.

Mink traps, like muskrat traps, are anchored to rocks placed out in the stream as far as chains will allow and can easily be camouflaged with a good coating of liquid mud. And, of course, all work must be done while standing in the water—not from the bank.

When ready-made holes are not present, artificial one's can be made with the aid of a trowel. Some sort of scratching tool is also needed to emulate scratch-marks left by muskrats. The hole should be from six to eight inches wide and at least ten inches deep, slanted slightly upward into the bank.

The important thing is to dig such holes so that about three-quarters of the opening is above water level. (See







photo numbers two and three.) For, not only will such a conspicuous hole attract a mink more readily, but they are not too fond of investigating dens which are completely under water.

Keep in mind that you are trying to imitate the entrance to an abandoned muskrat den or simply a hole dug by a muskrat searching for roots.

An exceptionally good mink set can be made by excavating artificial holes at spots where water from an under-ground spring seeps out of the ground. Dig the hole so that the water appears to be flowing out of it.

In cases where water seeps out of the ground several feet back or away

from the stream proper, your best bet would be to dig a narrow ditch about eight inches deep and not more than six inches wide. Obviously this ditch should lead the spring-water into the main stream. Place a large, flat rock across the ditch where the water enters the main stream, giving the impression that it's a drainage pipe.

If the ditch is not too long, the entire length can be covered with flat rocks. Set your trap in about three inches of water just inside the mouth of the ditch. This type of set is more or less freeze-proof and you can expect to catch nearly every mink that happens to come along all season.





# Let's Call Them Sporting Firearms

By Jim Varner

**N**EW YEAR's Resolutions are up for testing this month and during the months to come. Whether or not each of us lived up to our 1958 resolutions remains pretty much a secret with each individual. We hope, however, that each of you resolved last year and again this year to become more proficient with your favorite rifle, shotgun or handgun—that you aimed at becoming a better shot and did or will put in the practice that marksmanship requires.

Many Pennsylvania sportsmen are anxious this month to try out the new addition to the gun rack which you discovered old St. Nick left at your home Christmas eve. Many more did not get a new firearm for Christmas and unfortunately, relegated the old faithful hunting companion to

the closet at the end of the 1958 hunting seasons. So here's a reminder that your hunting license is still in effect; it won't expire until next August 31st. There's still a lot of enjoyment afield available to you. Just take advantage of January's invigorating weather and don't let the thermometer scare you. No one needs to be uncomfortable with modern cold weather clothing and shoes, regardless of how far down the mercury may be. And winter hunting for predators and other legal quarry will tax your skill and ability even more than the game you sought last November and December. There's still a lot to be done and a lot of fun in store for those sportsmen willing to try it. Don't lay your weapons away—use them this winter.

**FOX HUNTING** in mid-winter provides plenty of outdoor thrills. This "sporting firearm" is an L. C. Smith double barrel 32 inch length with both barrels full choke.



Before we go any further, perhaps we should pause and turn that word "weapon" over a few times on our tongue to get the unique flavor of its mis-use in our sporting firearms vocabulary. Somehow I do let the word get in now and then because of habit and carelessness. My good wife was the first one to protest its use some time ago. But I gave it little thought until my friend Jim Dee, Field Representative for the Sportsmen's Service Bureau, came to address our Kiwanis Club recently. While going over my articles as well as others, he asked with a twinkle in his eye if I had ever referred to the dictionary definition of "Weapon."

Webster defines the word as "an instrument of war or combat, or an implement of carnage and destruction." Jim's constructive tip is responsible for this column's title and I believe all of you will heartily agree with his suggestion to eliminate "weapon" from our terminology.

From a psychological standpoint it's easy to understand the effect that word would have on many people, especially parents who have never received any training in the proper care and use of sporting firearms. When little Junior starts begging for a real gun, probably a 22 rifle, the timid parent immediately thinks of "weapon" and immediately associates any and every gun with death and destruction. They think only of the accidents headlined in their newspaper. These same people give little thought to the fact that accidents can and do happen in many other ways and that compared to almost any other mechanical device, a sporting firearm is quite safe. Most accidents are caused by lack of proper training, not by the device involved whether it be car, bike, or gun.

When you consider the tremendous number of shooters going afield or practicing on ranges, the ratio of accidents per person involved is very low. We want to keep it that way or



even improve upon the record if at all possible. Much credit must be given the N.R.A. range training and hunter safety courses as well as the valuable charts and information provided by the Sportsmen's Service Bureau. All of these are valuable, especially to the beginner and the inexperienced.

To prove the point that proper training can prevent almost all accidents, take a look at the record of the National Rifle Association. In over 80 years there has never been a fatal firearms accident on a range operated under N.R.A. supervision. Moreover, no N.R.A. member has ever been involved in a hunting fatality and since the N.R.A. Junior Marksmanship program was adopted in 1926, there have been only four minor injuries recorded on ranges operated under its supervision. You can easily see by this excellent record that the basic principles of firearms safety can be taught our younger citizens easily, quickly and economically.

The ownership and use of sporting firearms is part of our American right and heritage. Every real American boy and many girls just naturally gravitate toward sport with a firearm. Skill with it issues a challenge. Its proper use develops coordination of the eye, nerves, muscles and mind to a degree few other sports can accomplish. A boy or girl needs not be a physical wonder to take part in the game. Most everyone is eligible whether young or old. So, fathers and mothers, when junior insists on owning a sporting firearm don't think of it as a "weapon," but think of it as a sport like any other recreational diversion that is helpful and whole-



some as well as a builder of confidence and self respect. You should be proud of your youngster for wanting to do something constructive and beneficial in contrast to those who show a tendency toward irresponsibility. Let him assert his true American spirit and help and encourage him all you can. The boy or girl who practices on ranges or hikes the fields with cooperative parents or reliable companions seldom causes any trouble.

How do we distinguish a "weapon" from a sporting firearm? In the past this was more difficult than now. When firearms were first invented they were crude, heavy and slow in operation and used mostly for military purposes. Down thru the centuries the "weapon" or military firearm continued to be a gun built for hard service. It could be used to fire and kill your opponent, club him with the buttstock or slash and stab with the bayonet—an instrument of carnage and destruction. Then back in the British Isles and Germany and

other European countries a refined version of a firearm began to show up. It was a sporting arm made lighter, more delicate and had ornamentation appealing to the eye. The fowling piece was made for birds and other small game and was a smooth-bore or shotgun. It could be used at short range on big game with round ball. Later the heavy rifles for Indian and African dangerous game were developed, especially in England. They were not intended as "weapons" for military purposes as they were unnecessarily powerful and were expensively made sporting firearms for the biggest game on earth.

In this country the development of early sporting firearms reached its peak in the beautiful hand-made, elaborately stocked and ornamented Kentucky rifles—actually Pennsylvania rifles as they originated in the Lancaster area. While these arms were used for protection as well as keeping meat on the table they were actually fine sporting firearms, each individually built and rarely any two

FOX TRACKS in the snow follow an old logging trail and lead to sport and adventure for this hunter. He's carrying a Model 97 Winchester with Cutts Compensator.



exactly alike. Along with these grand old flintlock and percussion rifles there were single and double barrel shotguns just as beautifully made. It must have been quite a feat to "clobber" a grouse or quail in flight with a flintlock shotgun using its slow hammer fall and poor ignition. Anyway, we were well on our way to producing sporting firearms that would suit the most fastidious sportsman who possesses pride in ownership.

The Civil War came and passed and breech loading firearms, both military and sporting, were developed in many designs and calibers from light express single shots to huge bench rest equipment and heavy calibered repeaters like our model 1886 Winchester which was chambered for such great combinations of powder and lead as the 45/70-500, 45/90-300, 50/110-350 and 50/100-450. These huge old black powder rifles were big game sporting outfits that left little to be desired as far as killing dangerous game was concerned.

Across the length and breadth of our nation there was a demand for better balanced, quicker firing sporting firearms both rifle and shotgun. Firms were paying big wages to experts on checking, engraving and plating of their fancy expensive models. Many were real works of art with the individuality of the soul of the master going into his work the same as the magic hand and mind went into the perfection of a fine old Stradivarius violin.

After World War One we had a "rash" of military "weapons" dumped upon the market that adversely affected the economy of our excellent manufacturers of sporting firearms who had done such a great job furnishing military arms for the government when needed most. World War II left us with a worse situation. We not only have all the junk of all the nations dumped upon our market in every shape and form but along with the worn out military arms, we have



COMBINATION predator hunt and game feeding expedition brought this group of hunters together for a winter's day of fun and worthwhile sport. Here they await their supply of corn and also receive instructions on how the hunt is to be conducted.

an avalanche of new firearms made by all the firms existing in free countries and some not so free. They imitate our Colts, Winchesters, Remington, Smith and Wesson and others, are chambered for our most popular cartridges, and are all "dolled up" to look like what they are not. A deplorable situation to say the least.

Our firearms companies are putting out the strongest, most accurate and most reliable sporting firearms made today anywhere in the world. They are precision made of the finest steels available and chambered to exact cartridge dimensions by workmen drawing American union wages and living under favorable conditions known only in the USA. As a group we should do our utmost to help maintain such standards. When we are inconsistent enough to go for this European junk and insist on paying the price for their new arms in preference to far better arms made here, it seems to me we are hopelessly inconsiderate and responsible for aiding a condition that can really slap us in the face. Think this over and compare performance records. You and I happen to be in a country where we can exercise our own judgment.



Taking a foreign sporting firearm at a cheaper price does not solve your financial problem. It only costs you more in the long run. If it needs repairs you will find very few gunsmiths willing to touch it unless they can obtain an excessive guarantee for their work. Buying a foreign military "weapon" (unless as a collection display piece) simply adds to your confusion. By the time you work it down to what you think is a sporting arm you have more invested than you would have in a well designed commercial sporting rifle and you still have a worthless "cluck" using an off-standard, hard-to-get cartridge that's never very accurate and always possessing a serious danger potential.

With the tricky advertising and unethical practices resorted to by many agencies selling this foreign junk it's difficult to separate the half way reliable firm from the totally unreliable. Why take such chances on long drawn out delays and hatched up excuses when you can just as easily deal with reliable firms you have known for years. I am talking from experience. I will admit I have been "one of those suckers." I have owned, operated and tested practically, every foreign junker and "wild-cat" made. Personally getting stuck has been responsible for helping others. Everyday I have some one of my many friends and followers ask my recommendation about this or that foreign weapon priced cheap or priced high with a lot of tricky cheap ornamentation thereon. My answer is definitely the same as written here. Whether it's a boy or girl with their parents purchasing their first 22 rifle, or a more experienced shooter buying his first big game rifle, match 22 or high grade shotgun I usually go

out of my way to place a sample of our modern American sporting firearms alongside the foreign one some inexperienced self appointed "expert" recommends. If I don't have the arm in question and I am unable to verbally convince said friend, I take him to some dealer who does have the gun and we "inspection shop" for information and comparison. Everyone is entitled to their individual beliefs and until someone definitely convinces me I am wrong I'll stick to American sporting arms for Americans.

Starting this January, and from now on let's get to calling our rifles, shotguns and handguns by their correct name. Let's make this a New Year's resolution. One of my readers stated his desire was to live longer. He believes an old sportsman will live longer if he don't drink, gamble, smoke or stay out late. No doubt it would seem a lot longer. For such saints with time hanging heavy on their heads I suggest you join your local N.R.A. club or Federated Sportsmen's club and really enjoy the extra years allotted to you for good behavior until old Saint Peter decides to put your name on his roster. All of us interested in the great outdoors should be a booster of these group training clubs right along with the Saint mentioned above. Let's think of our firearms in their proper light as a recreational asset to enjoy and help make our extra time interesting. The modern firearm fits in with all ages. The interest in shooting is definitely on the up-trend so let's not scare or handicap the beginner by calling the chief instrument of this grand sport a "weapon." Let's call it a "Sporting Firearm."





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## NAME THE GOOD OUTDOOR MANNERS RACCOON

# A Conservation Education Project Conducted By The Pennsylvania Forestry Association

## \$1000 IN AWARDS

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2nd Place Award	\$150 U.S. Bonds

## Additional Prizes

3rd Place Award	\$100 U.S. Bond to boy; \$100 U.S. Bond to girl
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Two Honorable Mention Awards to each grade, judged on a statewide basis:  
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## Rules of Contest

1. Contest is open to all students enrolled in ANY school within the State of Pennsylvania. A youth group—school, class, club—is eligible to participate as a unit, and the entry it submits will be judged in competition with the names entered by individual students.
2. Contest is to provide a name for THE RACCOON which is associated with the slogan "HAVE GOOD OUTDOOR MANNERS."
3. A statement, of 25 words or less, telling WHY the name submitted was chosen, must accompany each entry. These statements will be rated and used to determine place winners among those who submitted identical names. Selection of winners will be based on appropriateness of NAME submitted, and on the originality, clarity, neatness, and spelling of the brief statement.
4. From names submitted ONE will be selected which in future annual contests and in general publicity will be USED to identify THE Good Outdoor Manners RACCOON.
5. No entrant will be given more than one prize.
6. All entries must be mailed to The Pennsylvania Forestry Association, P. O. Box 389, Ardmore, Pa., and must be postmarked not later than March 15, 1959.
7. All entries become the property of The Pennsylvania Forestry Association.
8. Winners will be announced in May and prizes awarded promptly.
9. Contest judges will be representatives of the sponsoring agencies and others designated. Decisions of the judges will be final.



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# PENNSYLVANIA GAME NEWS

FEBRUARY, 1959

TEN CENTS







# THE STORY BEHIND THE COVER

**I**F any bird is to blame for the ill-repute and popular misconceptions about the hawk family, the Accipiter portrayed on the front cover this month is probably responsible. No other hawk is so much a “chicken hawk”; no other bird of prey is so often seen raiding poultry farms and game bird coverts alike.

The Cooper's Hawk, to begin with, is one of the most common hawks in nearly all parts of the United States. It nests over wide areas of Pennsylvania, building a bushy mass of twigs lined with bark far above the forest floor, quite often in the tallest white pine or beech trees. Here it lays three to six chalky, blue-white eggs. Sometimes called the “Blue Darter,” the Cooper's hawk looks about like its cousin, the Sharp-shinned Hawk, but is somewhat larger. The chief difference between the two, at least to the field observer, is that the sharpshin has a square tail and Cooper's a rounded tail.

Alert, swift and fearless, the Cooper's hawk roams the woodlands, carrying terror to most other members of the avian world and leaving behind it a trail of death and destruction. More than a third of its diet consists of game birds and poultry; most of the rest is obtained from the songbird list. Unlike most other hawks, it takes only a few insects and not very many rats or mice.

As a hunter, the Cooper's hawk knows no peer. Its short wings and long tail enable it to weave and dart through the heaviest cover with amazing swiftness. It is so bold that more than one farmer has been surprised by seeing the “chicken hawk” chase the chicken smack inside the barn.

But despite all its destructive ways, the Cooper's hawk certainly doesn't deserve extinction. Strong, daring and perfectly fitted for its purpose in life, this bird typifies predation with a courage that is admirable. No one can blame the farmer killing individual Cooper's hawks caught raiding the poultry yard; nor can the human hunter be blamed for halting its attacks on game birds and songbirds. This hawk is one of the few not granted protection by law in Pennsylvania (except in specified areas during fall migration) yet by the same token, wholesale slaughter of the species is not condoned. The bird probably faces no serious threat in this connection because it is too skilful, too smart, and too fast for most humans to outwit it, even with the gun. The march of civilization is probably its worst enemy. Like all wildlife, the problem is one of adequate habitat—living space which is rapidly disappearing under concrete and steel.

# PENNSYLVANIA Game News

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by the

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Commonwealth of Pennsylvania  
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Cover Painting  
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Editorial

## February Stands for Fur

**F**EBRUARY to many people means fur. Winter's snow and cold make milady's fine coat of mink, muskrat or beaver not only a luxury but almost a necessity. And to thousands, of men, women and youngsters the challenge of trapping beaver—the most valuable furbearer of them all—is beyond compare.

Trapping as an avocation, pursuit, sport or call it what you may is often overlooked in the headlines of the day. Even the pages of advertisements for February fur sales disregard the origin of the furrier's art. For without native, wild-trapped beavers or minks or muskrats, there could be few, if any, sales in the first place.

True—some fur is produced on mink farms. And some "fur" is synthetic—the magic result of modern day chemistry. Even more is imported from foreign countries. But almost seventy-five percent of America's fur comes from men and boys who brave icy waters and lonely hours on this country's traplines.

Why they persist in an artificial age is important. Their monetary reward is at an all-time low; the cost of their equipment and clothing at an all time high. There is very little, if any, profit in running their traplines. But there is an opportunity to pit their wits against a worthy adversary, a chance to enjoy a winter wonderland that is the outdoors at this time of year.

Fur is one of the oldest commodities known to man, at one time as important as gold or silver or precious gems. The quest for furs in North America led men across the continent for more than 300 years. The early history of our country was largely caused by a search for valuable fur. The earliest explorers had fur as their goal, the trails to which led them across the Allegheny's, the wide Missouri, and over the Rockies to the farthest reaches of our land.

This same spirit of adventure and exploration probably still leads most modern day trappers afield. For every stream and beaver pond is a challenge, every marsh and mountain valley a touch of the wilderness that once lay unbroken from the Atlantic to the Pacific.

The days when beaver hides and other pelts were standard currency over half a continent are gone forever. But the lure of the trapline still takes thousands of Pennsylvanians afield each February. They make wise use of a great natural resource. Conservation needs trappers just as much as it needs hunters or fishermen or bird watchers.





# "Fur and Square"

By Steve Szalewicz

I WAS rib-deep in Pithole creek, probing a beaver's burrow for a hole set. I figured he could be had here, easy. Last night he took my aspen sticks. Now I could see them, bark peeled, soft wood nibbled until they were only thin, pale-green and ivory whips scattered on the creek bottom—like stringed cabbage in a salad mold.

Evidently he had too much room to maneuver out of his hole. Either that or he used another exit, one I hadn't found. So the probing.

But if this was a bank beaver, and like they say, he was too lazy to work and got the threatening gnash of teeth and heave-ho from the colony, he might be too smart for my trap.

Then this young kid came up. Looking down at me from the high bank, he was all excited. He told me what I already knew. Or the way upstream I had glanced at his traps for a ripple or a tight wire.

At one of his sets a beaver had chewed off a big hunk of aspen the kid had jammed into the bank. Down on the deflector of a washed-out old dam lay the kid's bait, licked smooth like a billiard cue.

Would I come down and take a look? He asked a couple more times. He did something wrong. The beaver should have stepped into the trap, 'cause he set it right under the bait.

I promised the kid I'd be down. Rather quick on my promises, I was, I thought later. Why should I help competition? Not too many beavers left in this stretch of creek. This isn't big colony, maybe a pair of old ones and some kits. There must be at least 60 traps in the sand and mud bars and in the natural and made deflectors. Heck, they're stomping over the banks like trout fishermen in April. These beavers will be scared.

But the kid was a new face. I knew the regulars. Like me, they got up early on these cold mornings. I had to drive 20 miles, sometimes 40, in February when the roads were not yet scraped, salted or cindered, risk a \$3,000 automobile breaking trail in valley-bottom roads, come home with my pants frozen after a wetting. It was a hard way to learn about beavers.

But all this kid wanted was some advice. All the time I'm complaining that someone should start teaching these kids how to behave out in the woods, show them the "ways" of the wild.

If I give him a few pointers I may not get the three beaver I need to pay for these new waders, the gloves and a couple of traps. And what if I "ditch" the auto like last spring when I tore an oil pan and jammed the muffler? Never did get out of the \$80 hock with the garage until hunting season.

Of course I wasn't trapping beaver just for the money. I'll admit I get a kick out of second-gearing down into a valley covered with snow. Why up on the Woodcock, when my windows are not frosted and the dawn will break clear, I can see the round lodge-house from way up the hill.

As I crunch my way to the run, the unfrozen channels, olive colored with sandy, amber bottoms, are like jeweled pools toward which the snows seemed to have rolled and then hung on the edge admiring their new look, afraid to tumble in. I guess snow will become water soon enough anyway.

Even though I'm not much for poetry and poets, I sometimes wish I could twist what I'm thinking into a sonnet. But like that kid, there's a lot of things I'd like to learn.



For instance, some people can follow a fox track and tell you just what the fox was looking for, why he stopped where. Not me. Occasionally I see where one of those "reds" might have sat down atop the bank along the run. Maybe he was listening to the beavers chatting over a hunk of tough hornbeam. Old Red would prefer a lean grouse so he turns up the hill to the hemlock roosts.

I guess I learned some things about animals and nature in 20 years of trapping. And about people, too. Especially when beavers were selling up to \$70 per. Things were rough those mornings. Came in on Woodcock one day to find some crook took advantage of the thaw, hacked the hind leg off a beaver in my trap. Never did find out who he was since there was no way I could track him down. I remember then I couldn't set my traps without some guy setting his a foot away. Or when they used to excite the beaver so that they would make that last desperate struggle to get free and leave only toes for my trouble. That was rough competition.

Then I complained about sportsmanship. Maybe that's why I was heading down the creek to see what the kid wanted.

Look kid, I said, pointing to the sharp, short stub still jutting into the creek. You can see in the mud how the beaver fooled you.

His home is over on the other side. Under that bank. It's deep. I tried to set his hole. But even with my waders, it's still too deep.

Now when he came out last evening, he smelled your bait, swam over, sat up on his tail, chopped through the aspen real quick, floated his meal to the old dam. Heck, you must have lugged that heavy piece of aspen for half mile. None around here closer than that.

How did he miss your trap?

Well you see that you placed it smack dab under your bait. Look, the

bait was hardly 20 inches above the pan. Too close. That's a big beaver. You can see by the sign in the mud.

What you do now is to get another fresh-cut aspen. Reset the bait. I suggest you move the trap to the upstream side. Or for that matter put in a trap on each side. But set them far enough away from the bait, about 30 inches, so that when the big boy angles in on the aspen and sets his back feet down, he's yours.

By the way that wire looks thick, but it'll twist off. Better put on another strand.

I left during the kid's excited "gee thanks." But if I was helping him, it shouldn't be wrong for me to give the kid some competition of my own. The way I figured I hadn't "steered" the kid wrong. Now I would try to steer the beaver into a front-paw set.

I went down creek to where I had stashed some poplar twigs and branches in a thornapple. The kid went uphill for his bait. Quickly I moved a trap, jamed a bouquet of twigs near the bank, dabbed on a bit of scent, stuck a husky snag into the mud bar and tied my wire to a springy willow.

Well, kid, I thought, may the best man win, fair and square.

The next morning I'm shortcutting down Schoolhouse Run, a feeder to Pithole Creek where the dam is, enjoying the sights like I do any other morning. It was a leaden sky, but light enough so I could see tracks in the new snow.

Tracks get me, like I said before. The squirrel makes neat ones, short stitches, from tree-to-deadfall-to-tree. Close home ties you could call them. But the deer along the run bottom were dragging their hooves in the deep snow. Their tracks were long stitches. You could say they weren't tied so close to home.

Trees get me also. I like to trap in snow. The pines, what few are spared to silhouette and shade hunting cabins, look like they sneaked their



"fingers" into the cake frosting and were trying to snap off the "goo."

Down in the flats where the slow water of the dam was settling the silt and flooding the willows, these dark and drab sand-bar shrubs were tied up into neat tufts by new ice. Like footlights, the snow and ice back-lighted the thornapple trees. On the outer edges of the pond they stood "on cue," long horizontal, snow-fringed limbs sweeping out as gracefully as the arms of a line of Hindu dancers.

I was thinking that maybe if a grouse would start drumming up the ridge in the hemlocks, or if a wood-pecker would rat-tat-tat-, the "corps de ballet" of thornapples would start a flat-footed shuffle. In this fantasy I heard a shot, and another. It's that kid, I thought. I kind of hoped so.

He was puffing hard when I got to him. Almost lost him, he said. Broke one of the strands. Had to shoot him twice. Might have missed the first time. He's a big one, isn't he?

I hefted his beaver. About 40 pounds. He is big, kid. Nice work.

Where did you get him? In the hind-leg set I showed you?

No, he said. In another trap I reset below. Did as you told me. Set the trap about 30 inches away from a thick piece of aspen, I dragged down from the hill. He must have stepped right down the pan. Thanks for the tip, Mister, he said, throwing the beaver into his basket.

Oh, that's all right, kid. I answered and continued up the channels to check my sets. I was beat fair and square. In fact I was outsmarted. An old hand like me should have known that the beavers in this valley, after chomping on willows, hornbeam, iron wood and hard thorn would go nuts over a fresh, thick cut of aspen.

And when that beaver came out last night and got smacked with the fragrance of freshly-sliced aspen-a-lamud, he paddle-footed right into the kid's set.

If I wasn't so doggone lazy, I'd have climbed the rocky half-mile of hill for the aspen. The kid's young and smart. He'll make good competition. Guess I'd better start climbing.





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## Bobcats Have To Eat Too

By Dave Mech

A FULL moon cast its glow across the hemlock swamp. The only sound was the soft thumping of a snowshoe hare slowly hopping down the runway toward a clump of succulent grass. He didn't see the dark form ahead in the shadows. As the hare approached, the form crouched lower, its stubby tail excitedly twitching back and forth. Suddenly, like a powerful coil-spring, the dark form leaped with outstretched claws upon the luckless hare. The stillness of the night was broken by the shrill screams of the dying animal—but in a moment it was all over. The flesh of the snowshoe hare was rapidly becoming bobcat flesh.

I have three friends, each of whom would have voiced entirely different reactions to this incident. The most outspoken, my small game hunter friend, would have uttered a volley of curses, threats, and condemnations

at the predator which had killed "his" game. My naturalist friend would have looked aglow with interest at "this marvelous example of Nature's scheme of life." The bobcat hunter, my third friend, would merely have declared, "Well, bobcats have to eat too." Each would have thought his view correct.

Taking a closer look at the object of this controversy, we find that the bobcat is predominantly brown in color, although many black and gray hairs are scattered throughout the coat. The belly fur is lighter but spotted with black. Weights of adult cats vary from 15 pounds to Pennsylvania's record of 44 pounds. However, the average weight is 15 to 20 pounds.

Although bobcats still exist in moderate numbers in Pennsylvania, few people ever see them. Their habitat is usually so rough and



rugged that they can easily keep out of sight. Mountain areas with rocky ledges, swamps, and tall timber are ideal locations for cats, even if they are near towns or cities.

There are three general areas of Pennsylvania where bobcats occur: the eastern Allegheny Mountain region, particularly the Hillsgrove section of Sullivan County; the Pike County region of the Poconos, where they are said to be gradually making a comeback; and the mountains in the southern half of the state. The latter area seems to contain the largest amount of bobcat range, especially in sections of Bedford, Huntingdon, Fulton, Franklin, and Adams Counties. Although Pennsylvania doesn't have many large concentrations of bobcats, a major portion of the state contains at least a few of these animals.

Whereas people rarely see the bobcat himself, they may find his tracks and droppings if they know what to look for. These indicators of the wildcat's presence are often found on

trails and old logging roads. When a cat comes to such a path, he usually follows it for a few yards or sometimes even a quarter of a mile. Sign found frequently on certain stretches usually indicates crossings. Cat tracks on a dirt road resemble fox tracks somewhat but are larger and do not show claw marks. In the snow, the tracks are about twice as large as foxes' since now the whole furred foot shows instead of just the small toe and heel pads. In addition to tracks, droppings of the bobcat are also evidence of his presence. Consisting almost entirely of fur, feathers, and bones, the cat's scats are three times the size of foxes'. Because bobcats often attempt to cover the droppings, scratching in the dirt may be found near them.

The most interesting features of the bobcat or bay lynx, as it is also known, will be disclosed by a look at its life history. In late February and early March the male bobcat starts his amorous wandering which may take him 20 miles in a single night.

CAT HOUNDS are a prized possession of some Pennsylvania sportsmen. To them, the sport of hunting wildcats on remote, snow-covered mountains is more thrilling than any other type of hunting.



Encounters with other love-bent males usually result in fierce struggles accompanied by caterwauling that would make any pair of old alley cats sound like mere kittens.

From 50 to 60 days after Tom finds his female feline friend, two to four well furred, spotted "bobkittens" are born. The den is usually in a rock ledge or old stump, or occasionally in a large hollow tree. About nine days after birth the kittens open their eyes and two months later are weaned. They are fully as active as our domestic kittens but are much cuter. Playfully hissing, mew-ing, and scrapping amongst themselves, the young bobcats seem to exemplify the goodness inherent in all of Nature's creatures. If my small game hunter friend could see these wild little balls of fur, even he would give up a few of "his" grouse or hares so that they could live.

The mother bobcat must hunt hard, for the growing kittens require large amounts of fresh meat. This is where the real controversy hinges. Being predatory by nature, the bobcat must kill other animals so that he and his offspring can live. This often causes trouble with man, for some species cats kill to eat are the same ones man kills for fun. Snowshoe hares, cottontail rabbits, and grouse are examples of species for which both man and bobcat compete. Large bobcats sometimes kill fullgrown deer. This is especially true when there is an overpopulation of deer, and they are weakened by lack of food, in the winter. Whenever my sportsman friend finds a bobcat-killed deer, he becomes outraged. However, game biologists have discovered that many deer that bobcats kill quickly would have suffered a slow tortuous death by starvation.

While much of the bobcats' food is valued by man, a large percentage is not. Bobcats eat many mice, porcupines, and red squirrels. To be sure, they don't control these species, but

along with many other predators, bobcats help to keep rodent numbers from getting out of proportion to their food supply. In so doing, they actually benefit man.

To obtain his food, the bobcat uses a different method from that of other meat eating mammals. Whereas foxes, weasels, mink, coyotes, etc. depend largely upon their noses for locating prey, the bobcat relies more upon his eyes. He has a poor sense of smell, but his keen eyes and ears detect the slightest motion. Once the prey is located, the bobcat tries to ambush it from a low branch or a hidden spot on the ground. This requires the utmost in silence and patience, but most members of the cat family have been endowed with these traits. The wildcat then leaps upon his prey with extended claws. Strong jaws and sharp teeth supplement the needle-like claws, and the prey is soon furnishing life for the predator.

As is the case with most predators, the bobcat has a much larger home range than any of its prey. This, along with a lower reproductive rate is necessary for the well-being of the predator for if he killed off all the prey in his area, he would soon have nothing to eat. A game protector friend of mine realized this once when he admitted, "You know, the bobcat is a good conservationist. He takes a few animals here and a few there, but seldom takes too many out of one area."

"That's one reason bobcats never get too thick," my naturalist friend explains. "They must inhabit large areas to survive." Apparently there's a lot of truth in these statements. Game biologists in Montana live-trapped and ear-tagged 81 bobcats and later recovered 48 of them. Fifteen had moved over five miles, and one had moved 23. Most bobcat trappers also realize cats move these long distances. If the trapper finds fresh bobcat sign, he doesn't expect the cat back until ten days to two weeks



later. It takes the wildcat that long to cover his home range.

Of course, when white man first settled Pennsylvania, he didn't know or care about these facts. He only knew that bobcats were killing his livestock. A \$15 bounty was placed on the bobcat, and he was continually persecuted. Meanwhile, much of Pennsylvania became settled, squeezing the wildcat out of a home in many parts. He no longer was a menace to livestock, and eventually the bounty was removed. The history of the bobcat throughout most of his northeastern range is similar.

Today, the bobcat is rapidly gaining a new status in the Northeast. Sportsmen find that there are few game species having his sporting qualities. Hearing a cat hound finally barking "treed" after a long hard chase over snow covered rocky mountains is a bigger thrill than getting a shot at a big buck. Many a deer hunter has been the envy of his companions upon bagging a bobcat.

Now that people have realized such high quality sport from the bobcat, they are not quite so jealous over his competition for game. They are willing to let him have his place in our forests too. In the Lower Peninsula of Michigan, people become so interested in bobcat hunting that they actually advocated partial protection for cats. Many hunters won't even kill a cat. Says one Michigan hunter, "We ran and treed 12 to 14 cats we did not take. "Michigan found that bobcats in the Lower Peninsula provided about 4,000 man-days of recreation per year. Therefore, since 1955, Lower Peninsula bobcats have enjoyed the protection of a closed season from March 15 to December 15.

The bobcat hunters in Pennsylvania are just as enthusiastic over their sports as are the Michigan hunters. However, fewer people in Pennsylvania realize how much sport there is in bobcat hunting. There



**TREED WILDCAT** marks the end of a long, hard chase. Many avid bobcat hunters do not kill their quarry but let them live to offer sport and fun for another day.

seems to be about the same number of bobcats in Michigan's Lower Peninsula as there are in Pennsylvania. During the last year of the bounty in Pennsylvania, 131 cats were killed, last year in the Lower Peninsula of Michigan, 132 were taken. There is no reason Pennsylvania hunters can't enjoy as many man-days of sport from bobcats as do Michigan hunters.

It'll probably be years before many people realize and admit that predators are good for something. However, the sooner Pennsylvania hunters learn that thousands of hours of top quality sport per year can be realized from predators, the sooner they will be treating themselves to a host of new hunting thrills.

Meanwhile, the bobcat will continue his nocturnal forays, to the dismay of the small game hunter. But, who knows, someday my small game hunter friend might be looking for more sport and adventure than can be found in his sport. He might be persuaded to join in a bobcat hunt. After pursuing the wily bobcat a few times and getting a shot or two at one, it wouldn't be long before he'd be willing to sacrifice some of "his" small game, explaining that "bobcats have to eat too."





# Why Buy Western Rabbits?

By David A. Arnold

**I**T'S a fact that more cottontails are taken by Pennsylvania hunters each year than any other game animal. The rabbit is the mainstay of small game hunting in the state, and many hunters will gauge the quality of the season by the number of cottontails they bag. Even though the cottontail is probably the most abundant game animal in Pennsylvania, many sportsmen apparently do not

fully understand the basic conditions which influence the crop of cottontails. Some sportsmen's groups and individuals would like to spend their money buying rabbits from western dealers, and some of these people attempt to encourage the Game Commission to spend large sums on cottontails for release.

A study conducted by the Pennsylvania Cooperative Wildlife Research Unit at the Pennsylvania State University under the supervision of Dr. Ward M. Sharp, U. S. Fish and Wildlife Service, and the late Dr. P. F. English, Department of Zoology and Entomology, the Pennsylvania State

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Paper No. 54, Pa. Cooperative Wildlife Research Unit—Pa. State University, Pa. Game Commission, Wildlife Management Institute, and U.S. Fish & Wildlife Service cooperating. Authorized for publication as paper No. 1627 in journal series of Pa. Agricultural Experiment Station.

University, showed that, if land has proper food and cover, restocking after the hunting season is unnecessary and a waste of time and money.

The study began in February of 1948 after some preliminary work had been started during the 1947 open season. This work and the study were carried out on 80 acres of University farmland. The area supported a better-than-average rabbit population and naturally was heavily hunted. It should be pointed out from the start that the land has been open to all types of hunting as has the surrounding territory; thus, there is no refuge of any sort to act as a reservoir for replenishing the area. Throughout the course of the investigation, no rabbits were planted on the study area with one exception. On that occasion a professor at the University live-trapped six rabbits from his garden and unaware that the investigation was in progress released them on the study area.

Two populations were considered each year as pertinent from the hunter's outlook. These populations were those that existed before and after the hunting seasons of 1947 and 1948. The area was censused with box traps for each population count except for the count made prior to the 1947 hunting season. It is virtually impossible to catch all the rabbits in box traps so in reality there were probably more rabbits present than were trapped.

During October of 1947, the study area was censused by a direct observation method. Each day for a month, walking trips were made over the ground, and each rabbit seen was charted on a map. From the map an estimate was made of the number of rabbits present. The results of this census indicated that between 48 and 52 cottontails existed on the 80-acre tract.

The last week of the 1947 hunting season gave hunters the impression that the area was "shot out." The



writer made several trips over the area during the final week of the season with a trained beagle hound. Only occasional short chases resulted and no rabbits were bagged during these hunts. Hunting results indicated that no more than five rabbits remained. However, after the hunting season 19 box traps were put into operation for 27 days, and at least 21 rabbits were found to have survived.

The traps were kept in operation continuously after the 1947 season and, by November 1, 1948, 118 different rabbits had been ear-tagged. Of course, not all of the 118 animals were still alive on the first of November. Some had been killed by cars and predators, and others by un-

known causes. By applying a mathematical formula to the tag return by hunters, it was found that approximately 86 tagged rabbits were on the study area when the hunting season began. In addition a number of untagged rabbits were present but the number of these could not be determined.

During the 1948 small game season, 30 tags were returned by hunters. Not all hunters returned tags as one gunner reported seeing another throw some into the brush. There was hardly an excuse for such behavior as 40 signs were put up on the 80 acres asking hunters to place tags in cans which were fastened below each sign. Enough signs were posted so that a gunner would sooner or later pass within a few steps of a can, but for some even a few steps out of the way was too much trouble. Such behavior hinders accumulation of data which might aid in providing more sport for all.

Hunting pressure was higher in 1948 than it had been the previous year. A new road had been constructed on the western edge of the study area and many parking places were available. At noon on the opening day, 15 cars were parked on the study area. At ten in the morning of the second day, 13 automobiles were counted. It was estimated that at least 75 hunters crossed the area on each of these two days. An average of 20 gunners hunted the tract each day of the open season. The days of greatest hunting pressure were Saturdays with the lows during the middle of the week.

The rabbit population withstood the shooting as several tags were turned in during the last week of the season. Nevertheless, the general consensus from hunters interviewed was that the area was again "shot out." Again this was not the case, as 35 different rabbits were captured by April 1, 1949. As before not all the cottontails present had been cap-

tured, but at least 35 breeding adults were known to have been on the area. Without spending a cent for additional stock, a breeding population of 20 females and 15 males was already on the tract, adapted to the environment, and already producing by the first of April. The minimum populations known to remain after the two hunting seasons showed conclusively that *no restocking* was necessary after either season.

Since there were 35 rabbits left after the 1948 hunting season, what then were the possibilities for next fall's population? Each of the 20 females had a chance of giving birth to 5 litters of 5 each; however, this production is seldom attained. A more realistic production would average 15 young per female. Previous studies on cottontail nesting in Pennsylvania by John Beule show that 35 percent of the rabbits born are doomed to die in the nest from various causes. If the nesting loss were the only destruction which occurs, there would be approximately 195 young rabbits at the beginning of the hunting season. Unfortunately young cottontails have many enemies which exact a heavy toll between the time they leave the nest and the advent of the hunting season. This juvenile mortality may reach as high as 65 percent of the animals which leave the nest alive. Assuming the maximum juvenile mortality occurs and 127 animals will be sacrificed to predators, disease, or other causes, 68 juveniles will still remain. Perhaps thirty of the 35 breeders can be added to this 68, since adult losses during the summer are usually relatively low. Even with the tremendous loss of nestlings and juveniles, the hunting season should open with approximately 98 rabbits on the 80-acre tract.

While the above discussion is theoretical, it is not unreasonable. An examination of the 1948 figures shows the plausibility. After the 1947 season a minimum population of 21 rabbits remained. By November 1948, 118

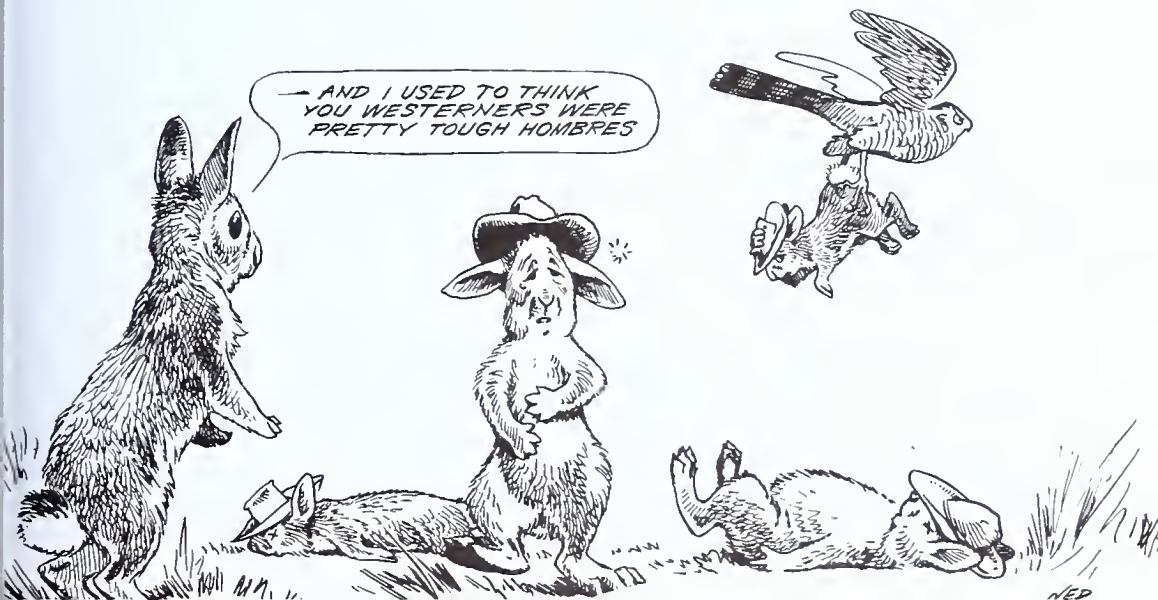


different cottontails were captured. The age-composition of the fall population as determined by October trapping and by tags returned by hunters was 70 per cent young and 30 per cent adults. This age grouping is nearly the same as that given in the theoretical estimate of the 1949 population.

In addition to the fact that a sufficient number of cottontails remain in good habitat after a hunting season, there are several other reasons why importing rabbits is not recommended. To begin with, the principle of restocking rabbits in the so-called "shot-out" areas is, to some extent, erroneous in itself. An area which furnishes the proper environment for cottontails can not be "shot out" in a hunting season of 30-odd shooting days. This has been demonstrated by the work at the University and has been substantiated by a long-time project in the State of Michigan where a definite effort was made to deplete the number of cottontails by intensive hunting over a period of years. If an area can be depleted of its breeding stock during the hunting season, the habitat certainly is not capable of supporting rabbits throughout the year, and any planted

there are probably doomed to die from causes other than hunting.

A tract of land, to be suitable for restocking, must have an abundance of escape cover as supplied by a lot of brush and numerous woodchuck burrows. These burrows are of the utmost importance as they are the only type of escape cover capable of protecting rabbits in the face of our present heavy hunting pressure on farmlands. Not only do these burrows save rabbits from the hunters, but they also protect them from the rigors of winter weather. Without these burrows fewer animals would survive the shooting and even fewer would survive the winter to breed in the spring. Rabbits released on an area without sufficient cover and food have a very poor chance of living through the winter. Imported rabbits are necessarily planted in a weakened condition and at best have only a fair chance of survival even with optimum cover. The confinement while being readied for and during shipment markedly reduces the vitality of western rabbits. When they are released in a strange area where the food may be different and where they are unfamiliar with the escape facilities, they are handicapped in escaping



their natural enemies and in becoming acclimated.

Predation is another agent of cottontail destruction which must be considered when an area is to be restocked. Control of predators to the extent that cottontails can exist in spite of poor cover is difficult, costly, and usually impossible. If cover conditions in the fall are such that the area is depleted by hunting, the cover is undoubtedly too sparse to protect rabbits from predators later in the winter. In mid-winter snow may drift over burrow entrances and become crusted, effectively sealing them against rabbits. At the same time leaves are usually gone from the brush reducing the density of the cover and making rabbits more visible. Snow also plays a part in predation in that it effectively hides mice and other small animals while it reveals a brown rabbit feeding in a field against the white background. During severe winter conditions, predators which normally take few cottontails will take them in relatively large numbers and cottontails released in a weakened condition in unfamiliar territory are "duck soup" for the first predator that comes along.

An increased rate of predation on cottontails during deep snows was found when the two winters covered by the study were compared. In the late winter of 1948 snow covered the ground a good part of the time until late March. During that time, seven rabbits were known to have been taken from the area by predators of one kind or another. During the same period in 1949, snow covered the ground infrequently and for only a few days at a time. During the latter winter, only two cottontails were known to have been killed by predators. Release of rabbits in the area under the 1948 winter conditions would have killed them as effectively as shooting them as they came out of the crates. Native rabbits, on the other hand, are familiar with escape

facilities and even though predators catch some, enough survive to repopulate the range.

The possibility that disease might be imported with the western rabbits cannot be ignored. The most prevalent disease of cottontails is tularemia or "rabbit fever." The malady is fatal to rabbits and if a virulent strain were brought in, more native rabbits might well be lost than are released from importation. Although this disease occurs in Pennsylvania, it tends to be more frequent in the west. In many western states, some people do not hunt rabbits because they are afraid that they themselves may contract "rabbit fever"; yet some Pennsylvania sportsmen would import these same rabbits. Rabbits are not the only animals affected by this potent disease; the bacteria causing the infection is known to attack a long list of animals including man.

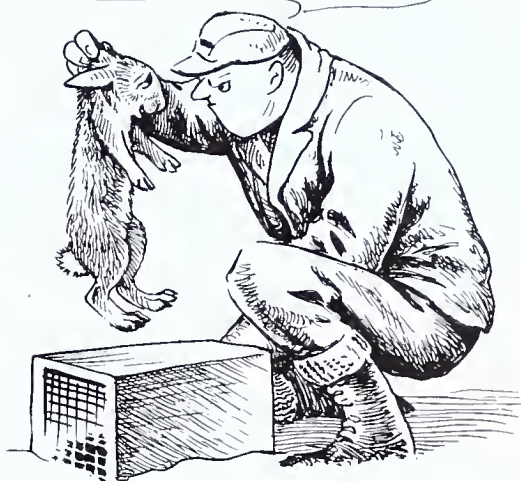
In view of the cottontail's ability to produce large numbers of young, an environment which assures an adequate breeding stock following the hunting season also assures a shootable supply of rabbits in the fall without restocking. If the environment does not retain an adequate breeding stock after the hunting season, the habitat is also unsuitable for restocking since the cover is unlikely to support rabbits through the winter in the face of adverse weather and predation. Restocking alone will not provide a shootable crop in the fall. When an area is depleted improved cover must be created before any planted animals will succeed. To release rabbits in the winter on an area without cover is a waste of time, money and rabbits.

After cover has been provided, restocking may be used to supply an initial breeding population to speed nature along in populating the area to capacity. The best source of animals for this purpose is Pennsylvania itself. Each year the Game Commission removes thousands of rabbits

from cities and towns where hunting is prohibited and releases them on open hunting grounds. These rabbits are not weakened by long confinement while being shipped and are completely adjusted to the climate when released. By cooperating with the local game protector, clubs may be able to trap rabbits from protected areas to release on areas they have improved with food and cover.

If a hunting area contains many brushy areas and woodchuck holes adjacent to cultivated land, the chances are that a sufficient number of cottontails do remain to restock the area by themselves. If most of the young rabbits born lived to maturity, they would have to be hunted the year around; otherwise, they would soon become so numerous that farm crops, orchards, and forests would be severely damaged. By providing sufficient cover on your favorite hunting

BY THE WAY - WHERE WERE YOU IN HUNTING SEASON?



ground you give more adult rabbits the chance to raise more young and stock the land free of charge. Why buy rabbits when cover will buy them for you?

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## THE WILDCAT IN PENNSYLVANIA

Mention the name "wildcat" and the pulse of the average person naturally quickens. The sportsmen, however, who has followed dogs on the trail of the furtive creature, usually on snow in almost inaccessible country, knows this is sport only for the venturesome and the well-conditioned.

Hunters who like their sport on the rugged and unusual side derive more excitement from a wildcat chase than from any other type of hunting. Pursuit may continue for miles in rough terrain. These specialists among hunters seek or breed "cat dogs" (usually crossbreeds chosen for their trailing ability and stout hearts) to follow and tree the wild felines until they can arrive on the scene. Most of the hunts are on snow during the months December to April.

By the mid-1930's these colorful animals were becoming too scarce in the Commonwealth. The Game Commission therefore ceased paying bounty on wildcats in 1937 so as to save the species from extinction. Previous bounties for cats taken in Pennsylvania had ranged in amount from \$1 to \$15., beginning in 1866.

In recent years depredations by wildcats have caused some game hunters concern. But it is reliably estimated that the felines are not numerous in Pennsylvania at the present time. They do not reproduce rapidly, and hunters and trappers appear to be keeping the animal under control. Tolerant sportsmen recognize the fact that those outdoorsmen who prefer to hunt foxes, raccoons, wildcats, crows or whatever should have the opportunity to enjoy the chase of their preference as much as those who hunt game birds or animals.





# WALKIN' SHOES

By NED SMITH



## Know The Pines

1. What is the common pine of our burned-over scrub oak country?
2. Where are the seeds of the pine produced?
3. What pine is also known as the scrub pine?
4. How does the needle arrangement of pines differ from that of other conifers?
5. In Pennsylvania what pine tree attains the largest size?
6. What short-leaved introduced pine is commonly grown for Christmas trees?
7. What well-known rodent consumes large quantities of pine seeds?
8. What group of birds have bills especially designed for opening the cones of pines and other conifers?

*leaves that grow in clusters encased at the base in a papery sheath.* The fruit is a cone composed of numerous hard, overlapping scales. At the base of each scale is one or a pair of small winged seeds. After the fruit has matured (which requires two or three years) the cone scales dry out to such an extent that they curl back and release the seeds. The latter, by means of their wing-like husks, are widely dispersed by the wind. Unopened cones can generally be forced to open by bringing them into a heated house. Conversely, old cones that have been open for years will close perfectly when soaked in water. Open cones have been shown in most of the illustrations because those found beneath the trees are usually in that condition. Those of the jack pines are nearly always found closed, hence are shown that way.

**E**VERGREENS have always been the outdoorsman's favorites, particularly during the winter months when the hardwoods have been stripped of their foliage. The woods in February would be a gray place indeed were it not for the splashes of green they provide.

Of the conifers—pines, hemlocks, spruces, firs, cedars, and larches—the pines are probably the best known. They are represented in Pennsylvania by six native species and three rather common introduced species.

Pines can be distinguished from other conifers by their *needle-like*

Numerous wildlife species feed on the seeds of the pines. Among the mammals, the red squirrel probably utilizes them to a greater extent than any other. The tightly closed cones are cut down in the fall and stored underground, beneath the forest duff, or jammed into the forks of tree branches until needed. Mice and other small rodents consume their share, and such birds as crossbills (whose curious beaks are especially designed for opening cones) and grosbeaks are inordinately fond of the little seeds.

1. *White Pine*. Our largest and most valuable conifer, attaining a height of 100 feet or more. Open grown trees commonly have forked trunks; forest trees have straight, clear trunks. Bark on young trees is dark and smooth, on mature trees closely furrowed. Branches are arranged in distinct "tiers."

This is our only pine producing five needles in a cluster. They are extremely soft. The slender cones are 5-10 inches long and are without spines.



2. *Pitch Pine*. A medium-sized tree that often grows an uneven crown of twisted branches. This is the common pine of our burned-over scrub oak flats. The bark is dark brown, sometimes tinged with purple, and broken into irregular plates.

The pitch pine is our only pine to regularly bear its needles in three's, although the shortleaf pine does so occasionally. The needles are 3-6 inches long. The cones are squatty, 1½-3 inches long, and armed with recurved prickles.



3. *Shortleaf Pine*. A tall, straight, small-crowned tree, a producer of valuable "yellow pine" lumber. Dark furrows divide the reddish brown or russet bark into scaly, rectangular plates.

The slender needles are 3-5 inches in length, two to a cluster except for an occasional three-leaved cluster, or rarely a four-leaved one. The cones are small, 1½-2½ inches long, with very slender prickles.





4. *Red Pine*. This large pine is a native of the north-central part of the state, but is widely planted elsewhere as an ornamental. The bark is reddish brown, shallowly divided into rectangular, flaky plates.

The needles are long (4-6 inches) and flexible, borne in two's in a long sheath. Strangely, the red pine's needles break cleanly when bent double, other long-needled pines do not. The cones are 2-2½ inches long, without prickles.



5. *Virginia Pine*. A generally scrawny tree that often invades abandoned farmland, this pine is commonly known as scrub pine. Open grown trees seldom surpass thirty feet in height, although forest trees sometimes reach fifty feet or more, with straight clear trunks. The bark is reddish brown, flaky. Upper trunk and larger branches are orange-brown and quite smooth.

The 2-3 inch stout, twisted needles are born in pairs. Cones are one or two inches long, with sharp prickles.



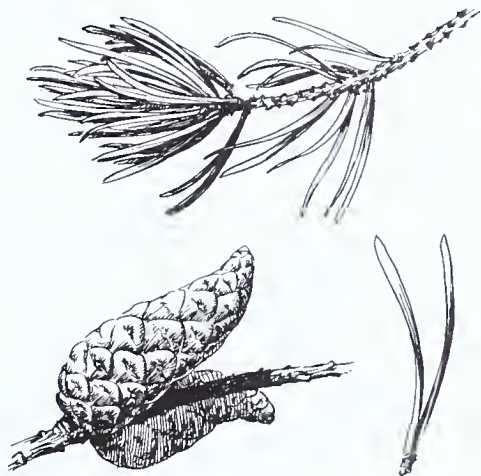
6. *Table Mountain Pine*. A small to medium-sized tree. Open grown trees branch near the ground, seldom exceed 35 feet in height, but forest-grown specimens reach sixty feet or more. The bark is similar to that of the pitch pine.

Needles are stout, stiff, 2-4½ inches long, borne in pairs. The cones are the most massive of our native pines, 2½-4 inches long, and formidably armed with large, hooked spines.



7. *Jack Pine*. A small northern tree, not often exceeding sixty feet in height. Not native to Pennsylvania, but introduced as an ornamental or watershed cover tree. The bark is dark brown, covered with small, round, scaly plates.

The needles are exceptionally short ( $\frac{3}{4}$ -1 $\frac{1}{2}$  inches) stout, stiff, twisted, and borne in two's. The cones are 1-2 inches long, curved, and are either without spines or with very small ones. They commonly point toward the tip of the branch.



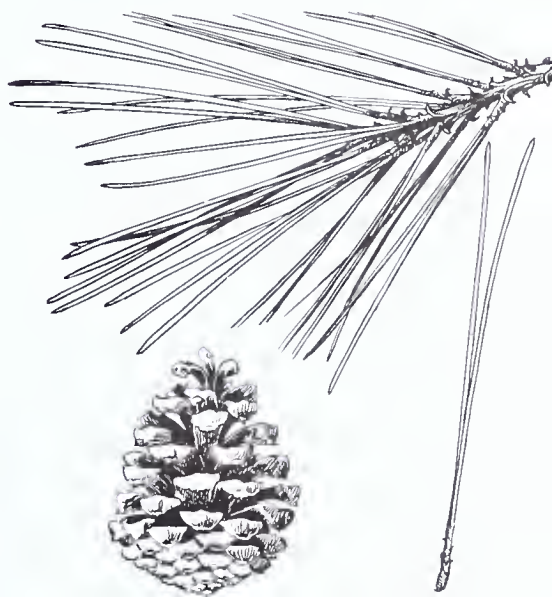
8. *Scotch Pine*. This European tree is widely grown for Christmas trees, as well as ornamental and reforestation purposes. Usually small, it occasionally attains a height of eighty or 100 feet. The bark of the upper trunk and boughs is orange-red.

The 1 $\frac{1}{2}$ -2 $\frac{1}{2}$  inch cones usually point toward the trunk. The ends of the cone scales are greatly thickened and either smooth or armed with extremely small prickles. The paired needles are stiff, somewhat twisted, and two or three inches in length.



9. *Austrian Pine*. Another introduced tree, this one is a favorite ornamental species. It retains its attractive pyramidal form for many years, becoming flat-topped and quite tall at maturity. The bark is generally very dark, broken into scaly ridges.

The cones are large (2-3 inches) with very small spines. The needles are 3-5 inches in length, somewhat heavier and stiffer than those of the similar red pine.



## ANSWERS TO QUESTIONS

1. The Pitch Pine.
2. In the cones, as the bases of the cone scales.
3. The Virginia Pine.
4. The needles are arranged in clusters, the bases of which are encased in a sheath.
5. The White Pine.
6. The Scotch Pine.
7. The red squirrel.
8. The crossbills.



HAUNTED HUNTING GROUNDS—

# The Allegheny Elk Hunter

By Don Neal

**W**ITH the frontiers of our big game country shrinking with alarming rapidity and the true fastness of unspoiled wilderness getting to be a thing of the past, it is interesting to survey those areas which are still comparatively wild and consider what they must have been like in the good old days. And one can hardly do this without running into the ghosts of those famed pioneers and professional hunters who broke open these sections of wilderness and made a place for themselves and their families while facing up to the greatest of hardships.

They were men of a strange breed who refused the benefits of community life, meager as they were in the early frontier settlements of our

country, and pushed off into the almost unknown forests that lay to the west. Seemingly they had but one ambition. And that was to challenge the brute force of Nature—and to challenge it on grounds where every hazard favored their adversary. For there is, in many cases, a complete lack of reasonable reason for the changes they made.

Such was the case of Philip Tome who crossed over the mountains from the Slate Run section of Pine Creek and came down the Allegheny river in the year 1816. His family had been one of the first to push into the Pine Creek country and his father is credited with being the first white man to go upstream as far as Slate Run to establish himself. So it is likely, that even from his earliest boyhood, Phil Tome was accustomed to the rugged life of the frontiersman and knew little of the more settled life that was being lived in the established communities to the south along the Susquehanna river.

If he did, such a life held no interest for him. For at the age of seventeen he went into the area around the headwaters of Kettle Creek with a surveying crew and the abundance of game he found there held his interest, in one way or another, throughout all the active years of his life.

Phil had hunted with his father, Jacob Tome, since he was thirteen years old and it was more for the purpose of scouting the Kettle Creek country than to gain wages that the elder Tome secured a place for his son on the surveying crew. Because most of the elk in the Pine Creek section came from the direction of this wild plateau and returned there when they were driven hard in the hunt, they reasoned that it must be a place where the elk ranged in great numbers. And when Phil went there in the summer of 1799 he verified their judgment, for the forests there were crisscrossed with

elk trails and elk licks were numerous along the streams.

Therefore, for the next seventeen years this mountainous section from which flowed the headwaters of the Kettle, Pine, Sinnemahoning, and the Allegheny river was the hunting grounds of the Tomes and they brought from there large numbers of bear, deer, and elk. A part of this meat they used for their own purpose, but mostly it was salted and cured, then rafted down stream to be sold in the settlements along the river.

In the course of this time the settlement at Slate Run was growing steadily into a well developed community and many families had already pushed further up Pine Creek to break out clearings on the broad flats of the valley. Strangers were going and coming as they do in a new country that is vigorous with fresh opportunities. And with Pine Creek being the most popular of the waterways leading off into the wilderness of the west the traffic on the waters of the stream was increasing daily. Such activity was an encroachment on the freedom Phil Tome had hitherto enjoyed while the country had been wild and thinly settled, and because of this he decided to move to a less crowded area in the wilderness.

When this thought came to him, and was decided upon, he remembered that he had at one time followed an elk trail down from the mountains to where it crossed the Allegheny river at the mouth of the Kinzua creek. It was a place that appealed to him. For being far off in the unsettled part of his hunting grounds it lay at the very heart of the Seneca Indian country where the friendly Chief Cornplanter controlled the hunting and trapping rights. And, as he already spoke the Indian language and had been highly successful at getting along with the Indians he hunted with in the Kettle Creek country, it was, in his opinion,



an ideal place to make his new home.

It was in the year 1816 that Phil Tome finally loaded his canoes and moved north on Pine Creek, portaged across the mountains at Canoe Place, then floated down the Allegheny river to the mouth of Kinzua Creek. He built a cabin there and spent the rest of the year, but for some reason the country wasn't as suited to his purpose as he had thought it would be so he moved north along to the river, further into the Indian country, and settled there. He remained at this location for the next six or seven years hunting and trapping on the Seneca lands.

It was while he lived at Kinzua Flats, though, that Phil Tome became known among the Indians as "The Elk Hunter" and although the Indians bestowed this title upon him at the time in a facetious manner they later came to respect him as the greatest of all those who hunted the elk. It came about this way. Tome went to Chief Cornplanter and told

him he intended to catch a bull elk alive so that he could float it down the Allegheny river and put it on exhibition at the various villages along the stream. After that, he would take it on down to Fort Pitt and sell it for whatever the animal would bring. Cornplanter laughed at him. Who, he asked, had ever captured a bull elk alive? Would his braves not do the same thing Tome planned if it was possible? Grudgingly he admitted, when Tome argued, that his braves had caught small elk, but even these were extremely strong and not of a size worth showing. No one, Cornplanter was positive, was capable of catching a full-grown bull elk, or of holding it once it was caught. He and his braves laughed at Tome for entertaining such a foolish idea, then kiddingly got to calling him "The Elk Hunter." Tome, however, had captured, or helped to capture, three bull elks previous to his visit to Cornplanter so he was unperturbed by the Indians' skept-

ALLEGHENY RIVER at Corydon still flows through wilderness, the scenery much the same as it was in the days of Phil Tome. Cornplanter Indians still live in this area.



cicism. He had been with his father when he caught the first bull elk known to be taken alive, and he had brought in two more on expeditions of his own.

Finally, after several days of talk, Tome did induce the Chief to loan him the services of one of his braves and sell him a piece of rope. Then he went down-river to his home at Kinzua where he joined forces with another hunter by the name of Campbell and in a few days the three of them, the Indian and the two White men, started up Kinzua Creek to hunt in the vicinity of where Kane, Pa., is now located. Here, on the highest plateau in Pennsylvania, the elk were scarce, so Tome led the party east to the headwaters of the Clarion river. Here they found elk, but they were all small bulls or aged cows, so he paid the Indian off and sent him home. Then he and Campbell turned northeast toward Canoe Place keeping to the high ridges that form the divide from which the waters flow off in three directions; north, east, and west.

When they reached there they met a man by the name of Lyman who joined forces with them and furnished, as his part of the hunt, three men and a horse, for he could not go with them as a member of the party. Tome loaded the horse with provisions, then led the reinforced group back along the ridge to where he could swing off into Kettle Creek country, for he had most always been successful at finding elk in this locality. But they had only hunted four days when the Lyman hands had had enough of the rough country and decided they wanted to go home. Tome talked them into staying three more days, but at the end of the week they left. Then he and Campbell moved to a camp further down on Kettle Creek and continued to hunt from there.

They hunted three days at this location without finding a good track.



Photo Courtesy Warren County  
Historical Society

PHIL TOME—the Allegheny elk hunter.

Then, as Campbell was unwell, Tome left him at the camp and started across the mountains to the headwaters of Pine Creek. He had only gone about seven miles when he found where a large elk had been browsing, but the tracks were so poor he couldn't determine in which direction the elk was moving. Because of this, he started back for camp. When he got there, he found a traveler who had seen the elk's track along the road and this man told Tome the direction in which the elk was going. Campbell suggested they go back for Lyman's hands, but Tome insisted there wasn't time for this and urged that he and Campbell go it alone. They stayed the night in camp, then started at daybreak on the trail of the elk.

They had no trouble picking up his track at the point on the road where the traveler had seen them, and they swung off into the forest to follow. Here, the going was unusually





KINUZA FLATS, former home of Philip Tome and currently the site of controversy over the erection of the Kinzua Dam.

rough, but they had progressed less than two miles until they sighted their quarry and Campbell cried out, "Its the biggest one I ever saw." Tome loosed their four dogs, and the hunt was on. Fourteen strenuous miles later the elk stood at bay on a large rock fighting off the dogs while Tome and Campbell prepared their rope and planned the approach to put the loop over its horns.

Tome cut a pole about fifteen feet long and fashioned the loop of his rope over its end. Then Campbell and the dogs went to the south side of the rock to draw the elk there while Tome got on the rock at its north end, and extending the pole out in front of him, approached the elk, trying to drop the loop over its horns. But the elk turned and charged him, driving him from the rock. When it had returned its attention to the dogs, Tome climbed a tree and went out on one of its branches that extended towards the belligerent animal. From here, he was able to place the loop over the elk's horns, then he dropped the rope to Campbell who snubbed it quickly around a young sapling.

When they had the elk securely tied, Campbell set off for Coudersport to bring horses and men and ac-

cording to Tome's reports was gone two days in the then sub-zero weather. But he came back with four men, extra horses, and a sleigh. Immediately they started out of the woods with the elk and two days later they led the animal into the town of Coudersport. From here, they took it to Olean, forty miles away, then to a smaller village on the river seven miles below. Tome never said what they finally did with this elk, but the following year he caught another one which they rafted downriver to Chief Cornplanter's settlement and then on to Warren where he made fourteen dollars and fifty cents on exhibiting it there. Within a month of capturing this one they brought another into Kinzua which they sold to a Mr. Tanner of Warren for five hundred dollars.

After this, Tome brought at least three more elk to the Allegheny River where he either showed them himself or sold them to others for this purpose. But all in all, from the reports available, throughout all of his life he remained a hunter at heart and got little enjoyment from playing the part of showman.

It was 1827 before Phil Tome settled at his home at Corydon on the Allegheny River near the home



village of Chief Cornplanter. By this time he was forty-five years of age and was, seemingly, becoming more settled in life with less and less desire to take off into the wilderness areas on hunts that would keep him away from home for months at a time. And now, having settled himself, he applied himself seriously to the job of being interpreter for both Chief Cornplanter and Chief Governor Blacksnake of the Senecas and because of the high regard these chiefs had for his judgment and friendship he was considered to be highly influential in all matters between the Indians and White men.

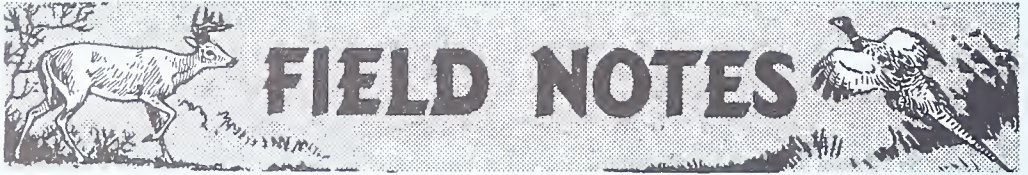
Phil Tome finished out his life at Corydon, which he had established by building the first cabin there, and died in 1855. But here, at last, he had planted his roots deeply in the wilderness ground he loved so well and many of his descendants still reside in the small community that thrives at the very edge of the Allegheny Indian Reservation. And fittingly enough, his granddaughter, Lucia Browne, was the last teacher in the last Indian school to operate in the state of Pennsylvania. This was the school on the Cornplanter Grant and her pupils were almost every one a direct descendant of the old chief who had been such a close friend of

her grandfather. The school closed in 1953.

The area Phil Tome hunted over in his active days, from the time he first hunted with his father on the tributaries of Pine Creek until he finished off with a series of spectacular live-elk conquests on the headwaters of Kinzua Creek, are still wilderness today. That is, they are as close to the true wilderness as you will find anywhere in a land as heavily populated as ours. But the encroachment of civilization is making its mark upon them. Good roads have broken the fastness of the high ridges and deep valleys that once were the haunts of Phil Tome and his Indian friends. And yet, there are still some places, high rocky ridges and dark mystic ravines, which seem as unspoiled as if man had never come to them and it is here, in these places, that if one will stop and listen he can almost hear the footsteps of "The Elk Hunter" as he follows an elk trail that leads off to the Allegheny, the Kinzua, the Kettle, or the Pine. For surely this hunter has gone with his Indian friends to a Happy Hunting Ground. And to Phil Tome this would be no other place than the wild plateau that lays atop the big divide from whence the waters flow three ways—to the north, the east, and the west.

PINE CREEK at the mouth of Slate Run as it is today. Here the Allegheny elk hunter hunted with his father when he was a boy over a century ago.





### Month Of Surprises

**WYOMING COUNTY**—November was an unpredictable month. Young squirrels were being found whose eyes had not yet opened, small rabbits were being killed, hundreds of Snow Geese were resting on the North Branch of the Susquehanna River, and a bulldozer working on roads in State Game Lands 57 uncovered some of last year's snow.—District Game Protector Phil Sloan, Tunkhannock.

### Good Samaritan

**BUTLER COUNTY**—On Saturday, November 1st, in Butler County a sportsman on the way to work happened to observe a large, brown bird along the highway. It apparently was injured by an automobile. Being a good sportsman and outdoorsman, he decided to see if he could help it. He bent down to cradle it in his arms and received a powerful rap, right between his eyes, for a thank you. It was identified as an American Bittern, which is possessed of an extremely sharp and powerful three inch bill. Our sportsman could easily have lost an eye. The bird was restored to good health, then banded, and released.—Student Officer Robert P. Shaffer.



### Cute Kitty

**LACKAWANNA COUNTY**—During the past small game season a local sportsman, John Poslosney, and his brother were hunting small game in one of the more remote sections in this area named Ash Gap. Their dog treed a large animal which at first glance appeared to be a coon. However, upon arriving near the tree they saw that it was a massive house cat which had reverted to the wild. Upon seeing the hunters, the cat began growling and spitting, just as a bobcat would. It then made a leap of about 20 feet and landed in another tree, still growling at the hunters. John drew a bead on the cat and shot it out of the tree. The wound was not fatal, however, and the dog seized the cat as it fell, a battle royal ensuing. John was afraid to shoot again because of the dog and it was finally necessary to dispatch the cat with a club. John brought the animal for me to inspect. It was a large black male cat which weighed 14 pounds and appeared to be as tough as nails. There can be no doubt that this cat took a heavy toll of wildlife in the particular area where it roamed.—District Game Protector Steve Kish, Avoca.

### Delayed Action

**LAWRENCE COUNTY**—While hunting in Lawrence County near Ellwood City, Harry Wiley shot twice at a gray squirrel. The squirrel apparently not hurt, ran up the tree and into a hole. When Mr. Wiley returned to the same spot two days later, a very dead squirrel fell out of the same tree right at his feet. It was a gray squirrel and had been dead about two days.—Student Officer Leo J. Badger.



### Farm Fed Deer

**CUMBERLAND COUNTY**—During the month of November three male deer were killed in my district. Any one of the three would bear out the claim that the largest antlers are found in agricultural areas. One, an almost perfect eight point, weighed in at 196 pounds before being dressed out. Another eight point was estimated to weigh 155 pounds live weight. I am sorry to say these two fine animals were shot before season and left to rot had they not been found. The third buck was a fine seven point with a very large rack. It was killed by the most ruthless and efficient of all predators, the modern car. This deer was estimated to weigh 165 pounds before dressing out.—District Game Protector Homer Thrush, Mechanicsburg.

### Frank Buck

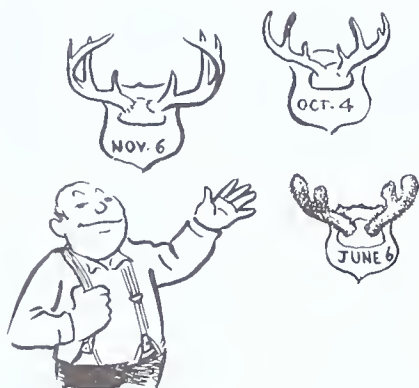
**ALLEGHENY COUNTY**—During the mid-part of November we had some unseasonably warm weather. It was quite a surprise, nevertheless, to check a hunter near Warrendale hunting in his shorts and skivvy shirt. It was 72 degrees that day, but it seemed rather unusual for any hunter to dress in the style for an African safari. He also was wearing rubber boots.—District Game Protector Sam Weigel, Gibsonia.



### Corn Huskers Go Home

**WESTMORELAND COUNTY**—F. B. "Dutch" Musick, a cooperator on Project 176, reported something new during the 1958 small game season. While inspecting a corn field to determine the condition of the grain, he noticed several hunters walking between the rows. Dutch was rather dumbfounded to see one hunter pulling ears and tossing them in various directions. He lost no time in contacting the "corn husker" to find out what was going on. The hunter briefly explained that he was pitching the ears of corn in hopes of flushing any game nearby. He couldn't understand why Musick should be so concerned about this since the corn stalks were "all dried up and dead." Our Farm-Game Cooperator was so flabbergasted and finally amused (luckily for Mr. Hunter) because of the stupidity of the city dweller that, rather than run the hunter and his party off the farm, he attempted to explain the whys and wherefors of farming, hoping to sow a few seeds, at least, of respect for the rights of others into the makeup of this poor misguided soul. This is just one example of the many reasons why "No Trespassing" signs remain so prevalent.—Land Management Assistant G. L. Bowman, Southwest Field Division.





### Pride Doesn't Pay

**GREENE COUNTY**—On Monday, November 10, 1958, at approximately 8:30 a.m., Deputies Lavins and Coneybeer, State Trooper Sadders and I (armed with a search warrant) checked a dwelling in Cumberland Township for a deer which was taken in closed season. We found the carcass in the defendant's home and when asked what sex it was, he replied that it was a buck. I asked where the horns were and he pointed to the wall in his kitchen. He had shot the buck on November 6 in Jefferson Township, hauled it home during the day, cut it up and wrapped the meat for the freezer. He then varnished the antlers and had them proudly displayed on his kitchen wall. His trophy was an 8-point buck. The defendant and co-defendant were each fined \$100 and costs of prosecution, plus a three year revocation of hunting license. This just shows how lightly some people take our game laws when, three days after killing a deer in closed season, they would have the antlers highly polished and displayed on the wall for everyone to see.—District Game Protector Richard Graham, Carmichaels.

### Double Trouble

**ERIE COUNTY**—Recently I investigated a hunting accident which proved that every hunter should make sure that he is carrying only the proper ammunition for the gun he is using. The victim in this acci-

dent was using a 12 gauge double barrel shotgun. He shot at a rabbit and missed. Keeping his eyes on the rabbit, he reached into his coat and slipped another shell in the gun. The shell seemed to disappear and he thought he had dropped it on the ground. He hurriedly slipped another shell in the gun. The rabbit came around again ahead of the dog and the lad fired. The right barrel split open at the forearm and the victim was lucky enough to receive only an injured and powder-burned left hand. The first shell he placed in the gun was a 20 gauge shell that slid down the barrel about six inches. When the proper shell was fired, both exploded. Another accident could have been prevented if the primary safety rules had been adhered to.—District Game Protector Roger Wolz, Erie.

### Hail To The King

**TIOGA COUNTY**—On November 28, 1958, after eight years of trying, the sportsmen in the Morris area finally killed what was commonly called the "King." This prize red bear dressed out at 375 pounds. Year after year these hunters tried to get this gigantic bear but he seemed to disappear the day before the season and kept hid until after it was all over. This year he didn't quite make it. On the drive near Morrison Bald Hill the "red" bear and a black bear, which weighed 280 pounds, were finally taken. On a drive the next day, near the same place, two more bears were killed.—District Game Protector Keith Hinman, Wellsboro.

### He Who Laughs Last

**LYCOMING COUNTY**—This incident was told to me by a sportsman from the Anthracite Camp, which is located on the Puderbaugh Mountain near Waterville. On the afternoon of November 29, the last day of the bear season, a few members of the Camp had shooting at a bear a short distance from the camp, but missed.

During the night, after the season, of course, was closed, the bear returned to the camp, broke into the camp refrigerator, and made off with a ham and pork roast. Early the next morning the bear was seen again just a few feet from the camp doorway, no doubt looking for more ham.—District Game Protector Mike Evancho, Jersey Shore.

### Starting A Mink Coat

**CAMBRIA COUNTY**—Answered a call from a housewife in Barnesboro with Deputy Game Protector Hank Miller. The family cat had something cornered in a drain gutter under the back porch. He set a rabbit box trap at the entrance to the gutter, waited approximately five minutes and came up with a beautiful female silver blue ranch mink. The mink was apparently making a home in the drain as the housewife said it had been there several days.—Student Officer David C. Kirkland.

### Web Feet, Mustache and Possum Tail

**BEDFORD COUNTY**—A confused and excited grocer called my office about a strange animal a local trapper had caught in a muskrat trap and had brought to his store for identification. His description over the phone included such items as a "groundhog with web feet," "tail like an opossum," and "it's got a mustache." It was hardly necessary to go and look to be able to tell that it was a Nutria.—District Game Protector John Troutman, Everett.



### Common Diagnosis

**PIKE COUNTY**—A friend of mine, a prominent Delaware County doctor decided to take up archery this year. One day during the archery season in October he and a friend, who happened to be a psychologist, went out to a wooded area. They were standing together on a trail when they were astonished to see a large doe come running toward them. The deer continued on unharmed after almost knocking them over. Neither had let loose an arrow. Later, when telling his story to another friend, the psychologist couldn't come up with an answer for their behavior at not shooting at the deer. Just a good old fashioned case of "Buck Fever." Ask any hunter!—District Game Protector Dan McPeck, Matamoras.

### Hunters Horn

**FAYETTE COUNTY**—While on patrol the first day, we saw a farmer picking corn in a field with a pick-up truck. The horn of the pick-up started to blow and upon investigating, the farmer related that was the signal to the hunters who had asked permission to hunt in that field when he had finished picking corn. I would say this was good cooperation on both the part of the farmer and hunter.—Student Officer John Badger.





## **GAME COMMISSION TO ENROLL 10TH CLASS OF STUDENT OFFICERS; APPLICATIONS NOW BEING ACCEPTED FOR CONSERVATION SCHOOL**

The Tenth Class of student officers to be trained for positions as Pennsylvania Game Protectors is presently being selected by the Game Commission. Successful applicants will be enrolled for training at the Ross Leffler School of Conservation located near Brockway, Jefferson County, on or about June 15, 1959. The course will be completed in March, 1960.

Approximately 25 men will be selected by competitive examination for this class. Any male, bona fide resident of Pennsylvania not less than 23 and not more than 35 years of age, with a minimum weight of 140 pounds, a minimum height of 5 feet 8 inches, not less than 20-30 vision (without glasses), and an educational background or training equal to a four-year high school graduate course is eligible to apply.

The Pennsylvania Game Commission inaugurated its first in-service training program for field personnel in 1932. This training for regular employees proved so effective that by 1936 the Commission established a fixed policy that all future field officers would be selected by competitive examination, followed by an intensive course of training. A training school, later named the Ross Leffler School of Conservation, was established and the first student officer class was enrolled on July 2, 1936. Since then the School has graduated

185 officers in eight previous classes. The Ninth Student Officers class is currently in training and will graduate in March of this year.

Complete information, including brochures and official application forms, for this student officer class can be obtained by writing the Pennsylvania Game Commission, Harrisburg, Pa. A brief outline of the general qualifications and regulations follows:

### **Residence Requirements**

Each applicant must have been a bona fide resident of the Commonwealth of Pennsylvania for a period of not less than one (1) year immediately preceding the closing date for application. To qualify as to residence, any applicant who was absent from the State because of military service, college attendance, etc., and who has not transferred his residence to another state will be considered a resident of Pennsylvania.

### **Age Requirements**

All applicants must have passed their twenty-third (23rd) birthday and shall not have passed their thirty-fifth (35th) birthday prior to May 31, 1959. Deputy Game Protectors will be credited two years over and above the age limit of thirty-five for each five (5) years of Deputy service, but must not have reached their fortieth



(40th) birthday prior to June 1, 1959. All applicants are required to furnish birth certificates prior to admission to the School.

### **Height Requirements**

The minimum shall be five feet, eight inches (5' 8") taken in stocking feet, the maximum to be in relative body proportions satisfactory to the Commission.

### **Weight Requirements**

The minimum weight shall be one hundred forty (140) pounds stripped of all clothing. The maximum shall be two hundred (200) pounds stripped of all clothing up to six feet (6') in height, but an additional allowance of ten (10) pounds will be made if the applicant is more than six feet in height.

### **Vision Requirements**

Before any applicant shall be admitted to the School, he shall be able to pass a 20/30 vision and color test without glasses.

### **Physical Examination**

Each applicant shall be subject to a rigid physical examination and shall be free from all physical defects including the shortage or loss of a member of the body. A preliminary physical examination conducted by a registered physician of this State must be made at the applicant's expense, a report of which shall be made a part of the application. The final physical examination shall be made by a registered physician appointed by the Commission or its agent, the cost of which shall be borne by the Commission. The certification of the Commission's physician shall be final.

### **Rates of Compensation**

Students selected for training will be paid a minimum of \$100 per month and a maximum of \$175 per month, depending on their marital status and number of dependents. Dependency allowance of accepted students will not be subject to change

during the training period. In addition, students will receive maintenance and subsistence during the time they are receiving specialized training at the School and necessary traveling expenses during the time they are engaged in field work.

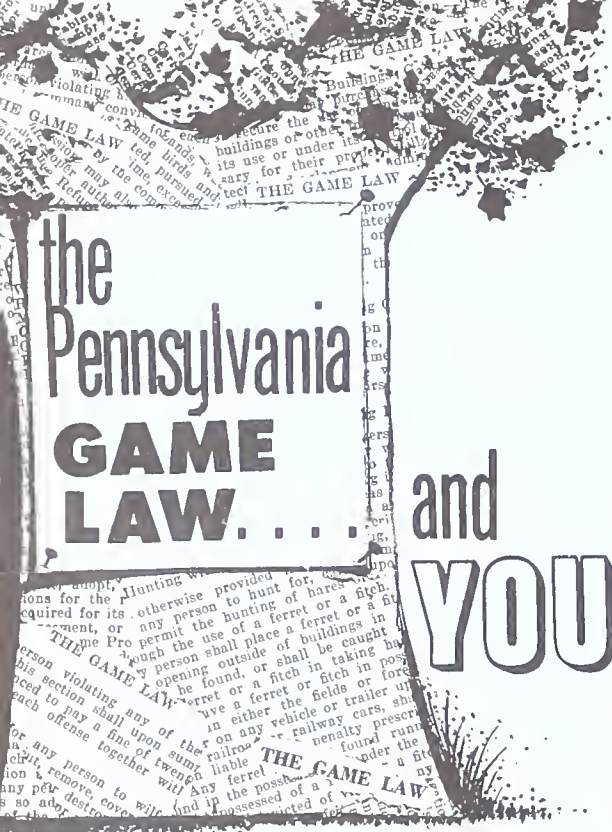
### **Assignment to Duty**

Applicants must signify their willingness to accept assignments to duty during the training, probationary period and regular duty at such geographical locations as the Commission or its agents shall select, without regard to the location from which the student was recruited. Trainees who successfully complete the course at the School and in the field will be assigned duty as game protectors, supervised by a Field Division Supervisor, on a salaried basis during a one-year probationary period from the date of graduation at the beginning salary of a Game Protector, currently \$3925 per year. Upon satisfactory completion of the probationary period, they will be assigned to existing vacancies in the field service.

### **How to Apply**

No application will be considered except those completed on official forms provided for the purpose and submitted by Registered Mail. The application must contain specific information, sworn or affirmed before a proper public official. If any application is returned for verification, correction or additional information, the corrected application must be re-submitted by Registered Mail within the date and hour prescribed. All applications shall be transmitted to the "Executive Director, Pennsylvania Game Commission, Harrisburg, Pa."

Competitive examinations will be held at Harrisburg on April 4, 1959. Accepted applicants will be advised as to the exact time and place. Oral interviews and physical examinations will start about May 21 for those candidates who received the highest grades in the written examinations.



ceding three months. The owner or person harboring such dog is subject to a fifty dollar penalty for each elk and twenty-five dollars for each deer pursued, injured, or killed. If such person neglects or refuses to prevent his dog from running game, after receiving written notice from an officer, the penalty is doubled.

Dogs pursuing small game during close season may also be destroyed by an officer, or by the person on whose land they are found tracking or killing game, unless the dog has a tag indicating its owner's name and address, together with a license. In the latter case written notice must be given the owner first. Persons permitting dogs to run small game out of season are subject to a ten dollar penalty plus five dollars for each animal injured or killed.

# Concerning Man's Best Friend

By John Sullivan  
Deputy Attorney General

EIGHT OF A SERIES

ON point, or splashing away after that crippled duck, or bringing the rabbit around with melodious fanfare, the dog may indeed be man's best friend in the field. But the General Assembly of Pennsylvania has taken a dim view of some of his less endearing characteristics.

Dogs pursuing elk or deer are officially declared to be a public nuisance in the Game Law. They may be killed by any person when in such close pursuit as to endanger the life of the pursued game, or when found in the act of killing it. Any officer whose duty it is to protect game may kill the dog upon affidavit of a person acquainted with the facts, certifying that the dog is in the habit of chasing elk or deer, or actually killed or injured an elk or deer within the pre-

Between April 1 and July 31 dogs may not be permitted to chase or track any wild bird or animal, except that the Game Commission on proper petition may open designated areas to fox hunting with dogs.

Between August 1 and March 31 they may, when accompanied by and under control of their owner or handler, be trained between sunrise and 9 p. m. Eastern Standard Time on any game except elk, deer, bear or wild turkeys. This period may be restricted if the Commission so decides. No firearm "usually raised at arm's length and fired from the shoulder" may be carried. No injury may be inflicted on the game being tracked. One exception is that dogs may be trained on raccoons from sunrise to midnight Eastern Standard Time. It



is unlawful to train dogs on Sunday without the consent of the land-owner, although no consent is required in the case of State and National forest lands. The Commission may change the designated hours to conform to Federal time changes (i.e., Daylight Saving Time). "Under control" is defined to mean within call except when actually on the track or trail of legal game.

A penalty of ten dollars and costs is provided for any person training a dog who permits it to track game contrary to the foregoing provisions.

The Pennsylvania Game Law makes special provision for field and retriever trials.

Field trials may be held without a permit, provided "due diligence" is exercised by those holding the trials to prevent the dogs from injuring or killing the game being pursued, during daylight hours from August 1 to the date fixed for the end of the training season. Trials may be held between April 1 and July 31 if a permit is first obtained from the Game Commission. It is unlawful for three

or more persons to participate in a field trial or meet without a permit, but when it is obtained, participants are not required to have either a hunter's license or a tag. The penalty for violation is twenty-five dollars.

Permits are required for all retriever trials "where the skill of such animals is demonstrated by retrieving dead and wounded game birds or animals which have been propagated or otherwise legally acquired and released on the day of the trials." They must be held on premises owned or controlled by the club or individual conducting the trials. The game must be shot for the purpose of retrieving at the trials. They may be held during daylight hours, except Sundays, between October 1 and March 31. Permits cost ten dollars for each day and trials are supervised by a representative of the Game Commission. Trial permits authorize killing of all game released on the day of the trials or at the trials themselves. Shooting may be done only by officially designated persons. The game may be killed without respect to sex or num-

**DOGS CAUGHT IN THE ACT** of killing deer may be killed by any person and the owner of such dog or dogs is subject to a twenty-five dollar fine. It is not recommended, however, that dogs believed to be only pursuing deer be shot. Such information should be turned over to game protectors or other police officials.







FIELD TRIALS may be held without a permit in Pennsylvania during the regularly established open training season. Trials may be held during the closed season but only after first obtaining a permit from the Game Commission.

bers. All such game must be tagged with Game Commission tags. As in the case of field trials, participants in recognized retriever trials are not required to have a hunting license or tag. Penalties for violations, however, are twice as great, since the statutory fine is fifty dollars plus costs.

Special provisions governing fox hunting are set forth in Section 722 of the Game Law. Fox hunting by organized clubs or groups with twenty or more fox hounds is permitted between August 1 and March 31, except when the Commission fixes a different period in any county. A per-

mit is required which is issued upon payment of a \$50 annual fee. No permit is required if the pack is less than 20 hounds, but all hunters are required to have a hunting license and tag. This is not necessary when the hunt is made under permit. The penalty for violation is one hundred dollars.

The provisions relating to dogs pursuing game have been upheld by the courts in *Commonwealth v. Dryfoos*, 80 D. & C. 173, 1953; and *Commonwealth v. Mullins*, 76 D. & C. 479, 1952.

## LAND FEATURED IN 1958 YEARBOOK OF AGRICULTURE

LAND, the nation's irreplaceable natural resource, is the subject of the 1958 Yearbook of Agriculture, recently published by the U. S. Department of Agriculture, the Wildlife Management Institute reports.

The 67 chapters in the 605-page illustrated volume were written by 93 authorities who tell in nontechnical language how we acquire our domain, its importance in history; the extent and values of Indian, State, and public lands; land uses and problems in Alaska, Hawaii, Puerto Rico, and each section of the U. S. proper; forested lands; and the acquisition of land for military, highway subdivision, and airport purposes. Major attention also is given to economic aspects of land tenure, ownership, use, conservation, and income.

Copies of LAND may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for \$2.25 each. Each Senator and Congressman also has a limited number for free distribution.



# CONSERVATION NEWS



## GAME COMMISSION ELECTS OFFICERS—SETS TENTATIVE 1959 SEASON OPENING DATES

The Pennsylvania Game Commission met in Harrisburg on January 8. The 1958 officers were re-elected to serve in the same positions in 1959. They are: President—C. Elwood Huffman, Marshall Creek; Vice-President—Andrew C. Long, Shamokin; Secretary—Dewey H. Miller, Bedford.

The Commission President announced the following tentative opening dates of the 1959 game seasons to give sportsmen an early opportunity to plan hunting vacations:

Archery Deer .....	October 3 (Saturday)
Small Game .....	October 31 (Saturday)
Bears .....	November 23 (Monday)
Antlered Deer .....	November 30 (Monday)

The waterfowl seasons for this year will be established after the federal government has taken action.

**Definite opening dates** and the length of seasons for wild game resident in the Commonwealth will not be determined until complete information as to the winter survival and spring reproduction of game birds and animals is available. Game and fur seasons and bag limits for the 1959 license year will be officially established at the July meeting of the Game Commission.

**PENNSYLVANIA'S RECORD DEER** was taken during the 1958 open season according to a preliminary check of Boone & Crockett Club records. The successful hunter was Hugh Murphy, left, shown here with his father, Martin. The big buck was shot on December 5, 1958 with a pumpkin ball fired from a single barrel, 12 gauge shotgun, in Huntington Valley, Montgomery County. It weighed 200 pounds. Rack dimensions were: Outside curve—25"; Circumference of beam—5"; greatest spread—28". The head is presently being mounted by taxidermist Fred Stoll of Willow Grove.

Photo Courtesy Hatboro Public Spirit







PGC Photo by Batcheler

**POOR RECORD** was established by the hunter who killed this bull elk during the 1958 deer season in Elk County. The small herd of wild elk which lives in this part of Pennsylvania is fully protected by law and is widely publicized. Commission officers George Koehler, left, and Howard Hoffman are shown examining the illegal kill for which there is no excuse.

**PAYMENT OF BOUNTIES—**After a full discussion of the predator situation and with particular emphasis on the advisability of continuing the payment of bounty on Red and Gray Foxes during the open hunting seasons, and upon motion made, seconded and approved, the following resolution was adopted:

### **RESOLUTION**

**WHEREAS,** After giving due consideration to the present predator population;

**THEREFORE, BE IT RESOLVED,** That the Pennsylvania Game Commission, acting under the power and authority vested in it by the provisions of Article XI, Section 1101 of the Game Law, by resolution adopted this 8th day of January, 1959, hereby directs that for the fiscal year beginning June 1, 1959, the bounty payments authorized for the birds and animals enumerated below, if killed in a wild state in any County of the Commonwealth during the period specified and presented in the manner and under the conditions stipulated in the Act aforesaid, shall be as follows:

Gray Fox—\$4.00 for each gray fox killed during all months, except that such bounty on gray foxes be discontinued with the open-

ing date of small game season, whatever it may be, and remain so through November and December.

Red Fox—\$4.00 for each red fox, killed during all months, except that such bounty on red foxes be discontinued with the opening date of small game season, whatever it may be, and remain so through November and December.

Great Horned Owl—\$5.00 for each great horned owl, adult or fledgling, killed during all months, except that such bounty on great horned owls be discontinued with the opening date of small game season, whatever it may be, and remain so through November and December.

**BE IT FURTHER RESOLVED,** That the foregoing Resolution shall be duly published in accordance with Section 1102 of Article XI of the Act aforesaid in the February and March issues of the PENNSYLVANIA GAME NEWS, also to be brought to the attention of the public by news release and other sources of public information; and

**BE IT FURTHER RESOLVED,** That the Executive Director is hereby authorized and directed to certify the foregoing as an act of the Pennsylvania Game Commission.

M. J. Golden  
Executive Director  
Pennsylvania Game Commission



## Forest Service Study Shows Good Management Produces Deer and Timber

Forests can produce both deer and timber in a balanced program—with a deer herd managed to prevent damage to timber production, and forestry practices to provide a steady supply of food for deer.

This is the conclusion reached from a lengthy study of the relationship between white-tailed deer and forestry in southern New Jersey's Pine Region.

This study was conducted by the U. S. Forest Service's Northeastern Forest Experiment Station in cooperation with the Department of Conservation of New Jersey. Work centered around the Lebanon Experimental Forest, New Lisbon, N. J., but covered all forest conditions found in the 2,000-square-mile area

BIG THREE in Pennsylvania hunting were taken during the 1958 seasons by Charles Steininger, Ephrata. All were taken in Centre County but it took 14 years of hunting to get his first turkey and first bear. He also posted a good score on small game, including 2 grouse, 5 ringneck pheasants, 7 rabbits and 4 grey squirrels.



of the "Pine Barrens"—the closest thing to wilderness in the Garden State.

Since 1928, extended observations and studies have been made to determine the food habits of deer in all seasons on different forest sites, and the relationships between deer and forest management.

Results of the research showed that during the dormant season—from mid-October to late April—deer feed chiefly on woody browse. On upland sites, deer browse both pine and oak, but they prefer young pine shoots. On lowland sites, where most deer feed, Atlantic white-cedar is the favored browse.

During the summer growing season, deer graze rather than browse—that is, they eat grasses, sedges, and other herbs in preference to tree growth.

In the early autumn acorns make up a big part of the deer's diet. But this food supply varies from year to year depending on the acorn crop and the competition from squirrels, mice, birds, and insects.

Overbrowsing by deer does much to stunt tree growth, especially that of seedlings, and may in time kill trees. This was repeatedly borne out by findings on hundreds of test plots. Furthermore, the most desirable browse—usually the most valued forest trees—suffers first and is replaced by less palatable species.

This loss reduces the carrying capacity of the area; the deer bringing about a progressive deterioration of their range. To put it another way; too many deer in a forest tend "to eat themselves out of house and home." Figures show that during the winter deer consume 4½ to 7 pounds of green browse per day.

Good forest management practices, it was found, are quite desirable for deer. While there is not the abundance of browse that results from clear-cutting, neither is there the lack of it associated with unbroken stands of mature trees.

## Extreme Care In Use of Endrin By Orchardists Urged By Pennsylvania Conservation Agencies

Two Commonwealth agencies have warned orchardists that careless use of a pesticide known as "Endrin" could cause widespread killings of fish.

The warning was contained in a statement issued by William Voigt, Jr., executive director of the Pennsylvania Fish Commission, and Secretary of Agriculture William L. Henning. The statement said:

"Endrin is one of the most powerful of known pesticides. Research has shown that a concentration in water as small as four parts per billion will kill fish.

"This poison has been used for a number of years, and is registered for use in Pennsylvania, for killing orchard mice and other pests. Manufacturer's labels urge extreme care in handling and applying this pesticide.

"We are informed by competent research specialists that the killing

component or components in Endrin do not break down and dissipate. Their affects are progressive and cumulative. Therefore, unlike many other lethal-to-fish substances that disappear as a result of the normal body functions of a fish, Endrin is stable. It accumulates in the fish liver and can be isolated and identified through simple laboratory tests.

"Endrin is a contact poison, not something that animals must chew. In view of this, users should take the utmost precautions to protect themselves. After using Endrin, farmers should wash their hands and any soiled clothing thoroughly.

"Unless the utmost care and caution are taken, fish in large numbers could be killed. Both the Clean Streams Act and the Fish Code prevent polluting the waters of Pennsylvania and provide penalties for violation."

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## HANDBOOK ON GAME COOKERY AVAILABLE

A famed handbook on game cookery, "Small Game for Dinner," by Anna Margrethe Olsen, has been reprinted for hunters and their wives by the Conservation Department of Olin Mathieson Chemical Corporation, the Wildlife Management Institute reports:

Copies of the handbook were exhausted soon after it was published by Iowa State College in 1947. The author is a research associate there.

The new 36-page illustrated edition includes all original recipes and tips for preparing and handling small game. One of the most valuable sections is on treating freshly bagged game in the field and bringing it home in top table condition. A section for the hunter's wife covers aging and freezing wild meats, table-dressing and dealing with small game in the kitchen.

Other sections include tips on tenderizing tough game, increasing flavor and juiciness, and preparing garnishes and trimmings. There are basic methods of cooking game with dry and moist heat and detailed recipes for everything from jugged game and gravies to barbecue sauces and popped wild rice. Advice also is given on making a game dinner a festive family occasion.

The booklet includes opossum, raccoon, rabbit, squirrel, and muskrat cookery and is a handy reference for the home end of a hunting trip. Free copies may be obtained on individual request from the Conservation Department, Olin Mathieson Chemical Corporation, East Alton, Illinois.



## OUTDOOR FUN WITH A FUTURE



# Let's Meet Some Furbearers

By Ted S. Pettit

Illustrations by G. Don Rey

**W**OVEN through the history of the settling of our country is the story of trappers and fur traders. Trading in furs and skins was, in all probability, the first industry of the new country for two important reasons: the demand for furs was great in Europe, and the supply of fur bearing animals was even greater here in America.

The first settlements were along the coast and up coastal rivers. The first exploration of inland areas was by the trappers seeking larger supplies of furs and skins and by the fur traders seeking barter with the Indians. Our earliest roads were the highways of fur traders bringing their skins back to the seaports for shipping to Europe, and many of our inland cities trace their history back to the days when they were trading posts where Indians and white trappers brought the products of their labors.

The fur trade provided the largest single reason for the exploration and development of North America. Daniel Boone, Kit Carson, Jim Bridger, Lewis and Clarke—all great names in early explorations were either trappers themselves or employed to find new roads to new sources of furs. Our forty-ninth state was originally added to our country largely because of its fur resources.

Even today the value of raw fur in the United States is estimated at close to 100 million dollars a year, and the over-all industry that includes the processing, distribution and sales of these furs is said to be valued at nearly one billion dollars. That makes it big business and important, too, for the wildlife conservationist. For like other wildlife species, furbearers are a product of the land. How we use the land, how we manage our forests and waters and how we manage our soil helps determine the future of the fur industry.

Because of the value of fur in the early days it is only natural that some animals were greatly reduced in numbers. The fisher, marten and otter





were wiped out in many areas. Now with proper protection they are making a comeback. Beavers once numbering 50 to 60 million across the country were greatly reduced, but now have been transplanted and are once again on the increase.

Let's take a look now at some of these animals that are so important today in social life and our economy.

### Muskrat

The most important furbearer in Pennsylvania as well as the country as a whole is the muskrat whose pelt has been sold under such exotic names as Hudson seal, Russian otter or river mink. This animal, so named because of its slight resemblance to rats plus the musky odor produced by a pair of scent glands found on males, is distributed over most of the state wherever there are shallow water areas containing cattails and other food plants.

Its presence in marshes is easily noted because it builds a house of water plants, cattails and sedges. Within the pile of trash that makes up the house, the animal builds a dry room above water level as a place to sleep. Several muskrats may live in one of these lodges. But smaller houses may be built, too, as places to feed. These houses are large enough, generally, for one animal and serve as protection while the muskrat feeds on plant life brought there.

In some places, muskrats live in

tunnels dug in the bank. The entrance hole may be below the water level, but the tunnel angles upward to a room that is above high water level.

Female muskrats may have four or five litters of young a year with five to six young to the litter. The young grow rapidly and in a month or so are able to find food for themselves.

The chief foods of this animal are the foliage and roots or bulbs of water plants such as cattails, grasses, wild rice and sweet flag. Occasionally they eat mussels or clams. They are clean in their habits and in some places muskrat meat is sold in reasonably large quantities in food markets. The trade name is "swamp rabbit."

Natural enemies of muskrats are hawks, owls, mink and foxes.

Management techniques include protection by setting open and closed seasons, setting season limits and most important probably, creating more marsh habitat with suitable water and food conditions for these animals.

### Raccoon

Once much more important than it is today, the raccoon is still one of the most important furbearers of Pennsylvania. Its population is probably at the all time high today and it is found over most of the state wherever wooded conditions provide food and den sites.

Raccoons make their dens in hollow trees, stumps or down logs and even in rocky ledges. In some places they have used man-made cavities such as nail kegs or nesting boxes. These animals are nocturnal in their habits and are not frequently seen in broad daylight.

Young are born in April in litters of three to five or six. They are covered with fur at birth, but their eyes do not open until they are about three weeks old. The young remain in a family group with the female until late fall. They may mate before they are a year old.





Raccoons feed on a variety of foods, including fruits and berries, nuts, insects and crayfish. Since much of this food is found at a considerable distance from water, the raccoon does not always wash its food before eating it.

Hunting raccoons with dogs on a cold November night is an exciting sport that once was much more popular than it is today. One reason for the decline may be the lower value of the pelt. Another may be fewer rugged out-doorsmen. For the 'coon hunt was a rugged sport.

Time was when the raccoon coat was the mark of distinction of the Ivy League collegian and his date. Rare was the big November football game that didn't see large numbers of coonskin coats dotting the stadium. Perhaps the popularity of the raccoon will make a comeback. There is evidence in that direction.

### Skunk

Another important furbearer of Pennsylvania, in terms of numbers trapped is the skunk, favorite of farm boys across the state. This animal, too, may well be at an all time population high in some areas.

The skunk is distributed across the entire state being most abundant in farm areas where forest land meets open country and farm land.

Skunks make their homes in holes they dig for themselves, in wood-chuck holes, old stone walls or under

farm out buildings or summer camps or cabins. They, too, are nocturnal in their habits, spending the day in their den in a nest of dry grasses.

Young skunks are born in the spring and are blind and helpless at birth. By June they are able to leave the den and go out with the female to learn to hunt and feed for themselves. It is at this time that they are sometimes seen walking single file behind the female as she leads them out to feed.

Skunks eat a variety of foods from field mice to fruits and berries. Many times one of the best evidences of their presence are the diggings in open fields where they search for mice or grubs. In addition, at different seasons of the year, they eat crickets, grass hoppers, wild cherries, blackberries and even garbage at a convenient dump. Skunks then are important to the farmer, not only as a source of income as fur, but also as a minor control over rodents and insects.

Skunks are best known for their distinctive method of defense. But even then they have natural enemies—chiefly the horned owl, fox and bobcat. Large numbers, too, are killed on highways at night.

### Beaver

Once the most important furbearer of the country and probably the one





animal responsible for more exploration and settling than any other. The beaver is once again making a comeback. Trapped to the point of extinction, protection and management resulted in an open season in Pennsylvania in 1934 and since then careful control has seen this largest of the North American furbearers hold its own. Its fur today, as in the past, is one of the more valuable taken from the state as well as in the country as a whole.

The beaver is well known as a forest engineer, and the affect of its dams on trout fishing and forests is a subject of considerable controversy among sportsmen and foresters. No one can deny though, that the dams, lodges and canals constructed by this animal are remarkable accomplishments. It sometimes takes dynamite to remove a dam that was built in only a few nights, and beavers often rebuild in one night a dam that several men tore apart in one day. For beavers today may cause problems when their dams result in the flooding of highways, farmland, orchards or forests.

Not all beavers, though, build lodges or dams. Some use a tunnel in a bank on the edge of a natural pond or lake.

Young beavers are born in April or May and remain in the lodge for a month or so. They then can leave the lodge and swim about seeking

their own food. Young beavers usually stay with the adults until their second winter. Then they leave the colony and move out to build their own homes.

Beavers generally feed on aspen bark, but will eat maple, willow, alder, apple or birch. In summer they often feed on water plants as well as grasses.

At one time in our history, beaver pelts were a medium of exchange, with a gun worth twenty pelts, 18 bullets worth one pelt, and a blanket worth ten beaver skins. Beavers, too, were eaten as food and the tail was said to be quite a delicacy.

Management of beavers consists largely of protection and live trapping for restocking suitable habitat where they are non-existent. Once established they get along on their own, since they have few if any natural enemies.

### Mink

The third most important furbearer in Pennsylvania in terms of dollar value of the raw fur is the mink. It is found usually not far from water and lives across the state from the salt water of the Delaware to the mountain streams and lake shores of the western part of the state. It is seldom seen because of secretive habits and may be much more common than is supposed.

Mink may live in muskrat houses, tunnels in stream banks, under tree roots along stream banks or in cavities in rocky places along the water. It wanders widely in search of food making long trips away from its home range.

Young mink are born in the spring and are helpless at birth. At five or six weeks old they are able to leave the den and follow the female out into the stream or marsh in search of food. Mink feed on frogs, fish, snakes, water insects, mice, shrews, muskrats and on birds. They have been known to clean out the occu-







pants of a muskrat house and then take it over as their own home.

Mink today are probably the most highly prized of all native furbearers. Their pelts bring a good price since at the moment the fashion is shorter haired furs rather than the longer raccoon or beaver. Well made wild mink coats may cost as much as five thousand dollars or more.

### Otter

Now completely protected in Pennsylvania because of its low population, the otter is probably the most magnificent of all the furbearers. It is now restricted to the northeastern corner of the state, but once was much more widely distributed.

The fur of the otter is the most durable of all American furs. It is thick and glossy and is used as trim on coats. At one time in Europe, its use was restricted to royalty.

The otter is an animal of the wilder parts of the state and is a shy animal. It lives along waterways and is accused by fishermen of destroying large numbers of trout. It eats some trout, but it also eats coarse fish such as suckers, and crayfish, frogs, snakes and other small animal life.

Two or three young otters are born in the spring in a burrow along a

stream bank. They soon learn to become expert swimmers and divers and to feed for themselves.

Otters are well known as playful animals that make slides on clay-banks or snowy banks of rivers or ponds. They glide down these slippery slides and at times a whole family of otters may join in sport.

Otters are taken in beaver traps occasionally and man is their chief enemy. Destruction of habitat and lack of living space now are the probable limiting factors in their increase in numbers.

Our native furbearers are among our valuable natural resources. In the 1956-57 season, nearly seven hundred thousand raw pelts brought close to three quarters of a million dollars to Pennsylvania trappers. Add to that the processing and manufacture of finished furs and we have an important contribution to the state's economy.

But these native animals are interesting in themselves to observe and study; their conservation and management is important too. So for fun with a future, get acquainted with these furbearers. Find out how they live, where they live and how their populations must be maintained.

# Annual Questions On Skinning And Pelt Care

By Larry J. Kopp

**Q.** Should fox pelts be cased or turned fur-side out?

**A.** Freshly skinned fox pelts should be placed on wooden fur frames, fur-side in, and left that way over night, then turned fur-side out. This improves the appearance and increases the value of fox furs. However, since fox fur has little or no market value today, even this does not help much. Fox pelts need not be turned fur-side out in order to claim bounty.

**Q.** What other furs should be turned fur-side out?

**A.** None. All furs except fox should be cased.

**Q.** Are wire fur frames better for muskrat pelts than wooden one's?

**A.** Wire fur frames are most economical if you trap muskrats extensively, as they are easier to handle and remove pelts from. For the average trapper, wooden frames are just as good and not nearly so expensive.

**Q.** Would it really pay me to skin my own fur animals?

**A.** Definitely. Fur buyers always deduct a small amount from fur prices if they are obligated to skin your catch.

**Q.** What is the best way to dry muskrat fur?

**A.** Shake the animal vigorously immediately after removal from traps to get rid of excessive water. Then hang upon suspended wire or rope,

front feet up, until thoroughly dry. Frequent shaking helps drying process along.

**Q.** How can I remove imbedded dirt or burrs which often appears on the tails of skunks and raccoons?

**A.** Use a sturdy comb, not necessarily wire, and comb dirt or burrs out of the fur.

**Q.** How can I avoid cutting into skunk musk sacs while skinning?

**A.** The best way is to cut around them and not skin the musk sacs at all.

**Q.** How do I remove the tail bone from fox tails?

**A.** Make a five or six inch cut on the under side of tail, starting at the base. Skin that portion the same as you skin other parts of the animal. Then clamp tail-bone between two fingers of one hand and pull the rest of the bone out. Don't forget to slit the tail open all the way to the tip to assure proper drying. This technique also applies when skinning skunks and raccoons.

**Q.** Where should skunks be skinned?

**A.** Select a nearby tree limb or suspended wire. Do not hang the animals on the side of a wall, as the wall merely reflects the musky odor towards you. All fur animals are most easily skinned when hung up by the tail. Use light chain with hook on each end.

**Q.** Where should I keep my furs until ready to market?

**A.** In an airy room or attic. A brooder house, or any other unused building would be a good place if windows are opened to allow free cir-







**PELTING AND SKINNING TOOLS** are shown here. It is possible to get by with only one knife, but a variety of cutting edges will do a much better job.

ulation of air. Wires should be suspended and furs hung upon them so that mice cannot get at them.

**Q. What is the proper method of hanging furs upon wire?**

A. Muskrat furs should be hung nose-down. All others having furry tails, should be hung up by the nose. Use small wire hooks and be sure that pelts do not touch each other until dry.

**Q. Wouldn't pelts dry faster in a room warmed by a stove?**

A. No. Heat does not dry, it merely causes additional moisture. Only air will dry pelts properly.

**Q. I have never skinned any fur-bearer—where can I learn how it's done?**

A. Study the illustrations appearing in **TRAPS TO WRAPS** for the December 1956 issue. Your local fur

buyer will be glad to show you how to skin animals.

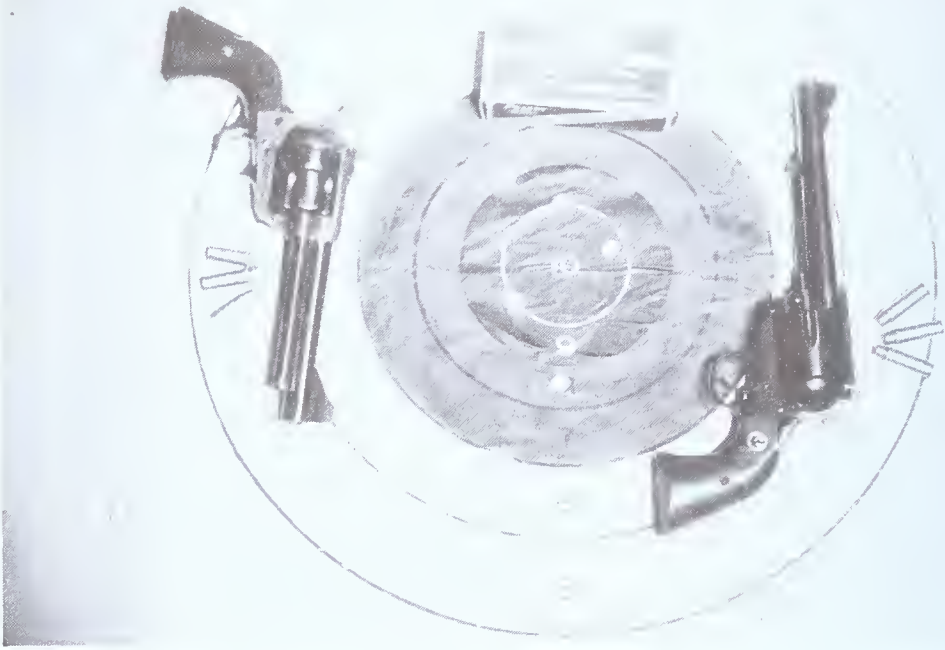
**Q. What is meant by fleshing pelts?**

A. Fleshing is the removal of excess fat which appears on pelts after skinning. Place pelts on drying board then use a dull knife and scrape fat off, working from the head toward the base. Much extra work can be avoided by simply pushing fat from pelt while skinning; that is, scrape fat toward the body of the animal while revolving it constantly, and do as little cutting as necessary. The pelt peels off easily as it is severed from the heavy layer of fat.

**Q. What sort of knife is best for skinning?**

A. One with a narrow blade approximately five inches long. Cutting edge should be sharp, and tip of blade should be very pointed.





# Technique With The Handgun

By Jim Varner

**O**UR second month of another new year is with us again. While it is the shortest as far as number of days is concerned, it does not lack in attractions for the outdoorsman. February starts with the ancient legend of the woadchuck and often ends with the call of migrating wild geese.

As the days get longer and indoor shooting begins to lose its zest, many of us seek the outdoor trail where we can find more latitude in plinking with the firearm Santa left us. It may be a handgun, rifle or shotgun but during this month, many of us are most interested in the sidearm due to its ease of carrying on the trail while feeding game, trapping, filming wildlife, or just plain hiking and woods loafing. Then, too, trout fishing will be here before we know it

and a good sidearm comes in handy to dispatch snakes and small predators.

Before grabbing the trusty old six-shooter and taking to the fields and forests, however, you should become thoroughly acquainted with the legal restrictions in the ownership and use of sidearms here in Pennsylvania. First, you are not allowed to use a semi-automatic (often called "automatic") pistol in the field as a hunting arm for either game or predators. This eliminates our excellent target automatics in calibers from 22's to the 45 caliber military arm. These are for target shooting only. You are allowed to use a single-shot pistol or a revolver, providing you first secure a permit which may be obtained through your local police department or the county sheriff's office. The fee for this permit is nominal.

Some states do not allow the use of handguns on either small or big game while others allow their use on small game only. Actually, the handgun is not recommended for the novice, the inexperienced or the fellow who is unwilling to take the time



to become proficient in its use. Abuses with these sidearms and gross ignorance of their power and range are developing a trend today toward the enactment of drastic laws. Let's learn how to use sidearms intelligently and proficiently and help prevent abuses that may encourage a "rash" of anti-pistol laws.

Be sure you know and understand all the legal requirements governing the ownership and use of pistols and revolvers in our Commonwealth. Our State is fair and reasonable in these requirements. A permit to carry a handgun for self-protection requires more stringent and careful investigation; this may vary some in the different counties.

The background subject of handguns is a huge one requiring a lot of research. It ranges back into the dim past of the early 16th century when German cavalry units employed volley fire from one-hand firearms with decisive effect in the battle of Renty in 1544. These pistols, as far as we are able to determine, were huge, long-barreled, all-iron wheel-lock

weapons made for use from horse-back. The development of the handgun was slow and its effectiveness questionable until a Scottish clergyman, Alexander John Forsyth, invented the percussion cap in 1807. Forsyth did not invent fulminates which were known at least a hundred years earlier, but he was the first to apply their use to the ignition of firearms. About 1835 Colonel Sam Colt put the percussion caplock to the revolver principle and his finished, multiple-shot firearm changed the course of history. The story of Sam Colt's life and the history of firearms bearing his name is as spectacular as the wildest fiction and certainly well worth reading.

On the assumption that most of our readers are interested in becoming proficient in the use of a good handgun, we will discuss the subject from the standpoint of outdoor use. Few persons prefer the single-shot so this will narrow our problem down to the many fine revolvers obtainable in all calibers, weights and barrel lengths.

**COLT'S KICK** is severe with the single action Peacemaker fired from one hand. The author is shown here firing a 246 grain Keith-type bullet powered by  $18\frac{1}{2}$  grains of Hercules 2400 powder. It develops about 1200 feet per second in the 44 S&W Special cartridge. You should never try to make difficult shots at targets or game at any distance from this off-hand position.





The arm shooting the excellent 22 long-rifle leads the list for most people due to its inherent accuracy, light recoil, cheap and convenient ammunition, and minimum report. The 22's are made in little snub-nosed and kit-gun varieties by Smith & Wesson weighing only 14½ ounces. At the other end of the line is their famous K-22 heavy target arm series with 6 inch barrels. This revolver weighs 38½ ounces and is made in matched models called K-32 and 38. Colt made a light model 22 in their Police Positive a few years ago but today their Trooper with 4-inch barrel, weighing 37 ounces in a matched 38 Special is their lightest. Their Officers Model Match has a 6-inch barrel, weighs 43 ounces in both the 22 and 38 Special. These are heavy, precision made target arms. Ruger comes in here with the Single Six 22's in light and standard weights plus the new light weight Bearcat weighing only 17 ounces. These are all replicas of the famous old Frontier Colt in smaller dimensions. I should add that Colt makes one of these

single six arms called the Frontier Scout. All of these little single action 22's are good trail revolvers. High Standard, Iver Johnson and Harrington & Richardson produce cheaper plinking arms in this caliber that are very good for the price.

Our next calibers after the 22's are, at their best, no better in performance and they cost three to five times as much unless you are an avid reloader. In this group I will include everything from the 25 automatic to the old 38 S&W—not the 38 Special. If you want only a short barreled revolver or automatic for the home or personal protection, that's different, but they still don't qualify as far as personal tests have shown. In this group only two or three are worth consideration as follows: the 380 Colt automatic or 9-M.M. short as the Europeans call it; the 9-M.M. Luger and the Colt or Smith and Wesson in the old short 38 S&W. or 38 short Colt with its 200 grain blunt nose bullet. This latter cartridge is called the Super Police and was made for the light framed short barreled arms

TREE REST is recommended for aiming the handgun while hunting big game. Bill Varner demonstrates here with the big 45 Colt new service target model with 7½ inch barrel.







AUTHOR'S 1958 DEER was killed on December 16 with the Ruger 44 Magnum Revolver at approximately 85 yards. Death was instantaneous.

many of our police departments are armed with. If you own any of these pistols or revolvers and are satisfied with them, that's your personal problem, but if you are considering a new arm, check and compare them with something better. Just two weeks ago I had a Police Officer from one of our nearby small towns bring me an ancient and decrepit Forehand and Wadsworth five shot 32 S.&W. caliber revolver to fix so he would have a "good sidearm" to carry. His duty is on a late shift in a questionable section. I took time off to take this young man out to the rifle range and showed him what he could expect from that rickety old dangerous revolver with its feeble ballistics. I invited him to join our N.R.A. Club, buy a 357 Mag. Highway Patrolman and learn how to use it. I hope the demonstration I gave him with the 357 and Colt Commander 45 auto with Super X armor piercing cartridges proved my point to this inexperienced officer.

Now we will consider medium calibered long range efficient cartridges that adapt themselves to adequate protection for the home in the short barrel category, as well as extreme accuracy for the target shooter and predator hunter. In this group we

have the Colt Super 38 automatic, but being illegal to hunt with we will let it stay with the target shooter, or for the home in its compact Commander version or heavier military model. The Commander model weighing only 26 ounces loaded with 10 Super 38 cartridges with hollow point bullets developing 1300 foot seconds velocity, formerly loaded by Peters Cartridge Company, gives one about all he can wish wrapped up in such a small package. Truly this is some trail pistol with its near 500 foot pounds of energy in each hull. The popular, universally used 38 Special in the many barrel lengths and weights by Colt and Smith & Wesson is too well known to go into too much detail. It is an old number coming out in the late 90's and known as the 38-44 S.&W. Target. Today we call the high velocity loads 38-44 and the regular's 38 Specials. The number 44 comes from the large frame revolver or 44 size frames being bored for this cartridge. This excellent cartridge can be used for anything from indoor target shooting, long range outdoor target work, and adapts itself to predator and game along the trail. Quite large game has been killed with it by expert pistol shots using maximum hand-loads and

semi-wadcutter bullets. With its ease and economy of reloading, combined with gilt-edge accuracy in our modern Colt and Smith & Wesson it is a good choice for the nimrod who doesn't care to go to the more powerful and larger calibers. I have seen this caliber in competition during the Camp Perry matches score groups on a man-sized silhouette at 300 yards that would hustle a 30/30 rifle to equal. Most all of the experts in these long range revolver matches used the Colt Officers model with 7½ inch barrels. These revolvers are no longer made but with our modern stepped-up loads similar accuracy could be expected out of 6½ inch barrels. When shooting at 200 and 300 yards the shooters fired from the sitting position with their back resting against a support and held the revolver with both hands resting over the right knee or any other way as long as it was not an artificial rest. Some use the prone position with a sandbag rest when testing handguns at extreme ranges. In the woods and along the trail don't forget to use a rest or support holding the arm in both hands for all the accuracy you can get. You fellows who consider a handgun a 30 to 50 yard instrument are in for a surprise if you equip it with adjustable sights and learn careful holding.

In this 38 caliber group we have

a modern one called the 357 Magnum. It was designed by Douglas Wesson some 20 years ago. It is simply a 38 Special case made stronger and about one eighth of an inch longer carrying a charge of powder developing rifle pressures. Such pressures would wreck most all of the older and light model 38 Specials which caused the designers to lengthen the case so they will not function in a standard 38 cal. arm of any kind. As far as I know this was the first commercial cartridge loaded with the Keith type semi-wadcutter bullet. This bullet design is roughly a truncated cone with a flat point and sharp shoulder at case diameter. Such a design increases shock effect up to 30% over the conventional round nosed slug without seriously retarding velocity. Its range and accuracy is phenomenal. I purchased one of the first Colt Single Action revolvers in this caliber in 1938. With its 7½ inch barrel it made a perfect hunting sidearm. That same year I killed a large doe with it at 75 yards range as it angled away from where it scented my presence. The bullet entered the back of the neck well back of the head and came out under the chin tearing a hole as large as a silver dollar. The deer dropped so quickly I thought I had scored a complete miss. I killed three deer up to

**EXCELLENT POSITION** for firing the handgun on game is sitting with a backrest. If the shooter is unable to easily stay in an 8-inch group from this position at 50 yards, he needs a lot more practice.





1943 with this sidearm as well as numerous woodchucks and predators then during an unexplainable weak moment sold it. Can any of you explain why we do such idiotic stunts?

The 357 Magnum is made in many models by Colt and S.&W. and one single action by Ruger. Select the one you like best, as you will make no mistake. They will all shoot the 38 Special cartridges as well as the best 38's and for that reason I would consider it over the shorter cartridge. It is a most versatile number, with all the advantages of the 38 Special series and the added advantage of a more powerful load. This is the cartridge used by the FBI.

From the 38 or 357 diameter cartridges we take a look at the big ones. This takes in the old 38/40 Winchester—actually 40 caliber and now obsolete; the 44/40 Winchester—actually 42 caliber and not made any more in revolvers. Winchester developed these black powder cartridges for the 1873 model rifle and Colt followed suit with his Frontier and New Service revolvers. They are all good cartridges but rapidly being discontinued from the cartridge lists with the exception of the 44/40 which will be used for many years to come. The other two old time big revolver cartridges are the 44 Smith & Wesson Special and the world famous Colt 45. The 44 S.&W. Special is probably the finest target cartridge made today despite the fact the commercial load is only a "pip-squeak" in energy when compared to maximum hand-loads. Only one revolver cartridge equals its maximum energy and that is the Colt 45 also hand-loaded, while only one exceeds it and that one is the new 44 S.&W. Magnum which almost doubles the energy of any other handgun ever made. This 44 Magnum will handle nicely all of the 44 S.&W. Special loads as

well as the old shorter 44 S.&W. Russian loads, like the 357 Magnum handles all of the 38 Special ctgs. but the 44 Special will not take the magnum load. The 44 Magnum as now loaded drives a 240 grain Keith type soft lead bullet that has a copper gas check to the amazing velocity of 1570 feet per second from a 6½ inch barrel developing 1325 foot pounds of energy. Gentlemen, that's real "mow-em-down" shock from a revolver weighing only 2½ lbs. Its recoil is severe and I certainly would not suggest it for beginners unless they use only the light 44 S.&W. Special cartridges for all their target work and trail shooting till they get the "feel" of the big gun. Impact velocity is sufficient to upset the bullet like a rifle and its killing effect is actually equal to, that of a 30/30 class rifle.

Whether you care to hunt deer with the handgun or not is for you to decide, but if you do hunt anything at all with any handgun strive to shoot it well. With any target type arm one should at least be able to keep all his shots in an 8 inch group or better at 50 yards when using both hands and resting from sitting position or alongside a support. Take advantage of anything that will assist careful holding. Remember all handgun bullets are slow compared to high velocity rifle bullets and ricochet badly. The big old 250 grain slug from the Colt 45 howls across the countryside like a 155 M.M. howitzer shell and scares the farmers half to death. Know where you are directing handgun bullets, or you will become unpopular as a handgun devotee all of a sudden. "Technique With The Hand Gun" can lead to many happy days on the trail. Don't leave that excellent revolver at home on your outdoor hikes. Take it along and get acquainted with it whether its a 22, 357 magnum or a 44 magnum.

# Combination Book & Gun Cabinet

By John F. Clark

Illustrated by the writer

**H**ERE'S a project that will help pass away some of that slack time this winter, and incidentally provide a handsome showcase for your favorite firearms. Most hunters and outdoorsmen usually have a collection of books on their favorite subjects so the book section will handle these very nicely. The shelves of the gun cabinet are for ammo storage and, if you have been skillful or lucky enough to win any shooting trophies, one or two of the shelves will show them off to good advantage.

All the material used in this cabinet is  $\frac{3}{4}$ " white pine unless otherwise stated in the bill of materials.

Here's a complete list of the materials you will need. (refer to the numbered parts on the exploded views.)

## BOOK CASE:

- #1- $\frac{3}{4}$ " x  $13\frac{1}{2}$ " x 6' 3"-Top-1 Req.
- #2- $\frac{3}{4}$ " x  $11\frac{1}{4}$ " x 29 $\frac{1}{4}$ "-Ends-2 Req.
- #3- $\frac{1}{4}$ " x 29 $\frac{1}{2}$ " x 5' 11"-Back-Hardboard-1 Req.
- #4- $\frac{3}{4}$ " x 11" x 5' 11 $\frac{1}{4}$ "-Shelves-2 Req.
- #5-1 pc.- $\frac{3}{4}$ " x 11" x 13"  
1 pc.- $\frac{3}{4}$ " x 11" x 2 $\frac{1}{4}$ " Supports  
1 pc.- $\frac{3}{4}$ " x 11" x 13 $\frac{1}{4}$ "
- #6- $\frac{3}{4}$ " x 2" x 25 $\frac{1}{4}$ "-Trim-3 Req.
- #7 & #8- $\frac{3}{4}$ " x 3" x 6'-Trim-2 Req.
- A-1"- $\frac{1}{4}$ " Round molding-17' Req.

## GUN CABINET:

- #9- $\frac{3}{4}$ " x 10 $\frac{1}{4}$ " x 47 $\frac{1}{4}$ "-Top-1 Req.
- #10- $\frac{1}{4}$ " x 47" x 56"-Back-Hardboard-1 Req.
- #11- $\frac{3}{4}$ " x 10 $\frac{1}{4}$ " x 56"-Ends-2 Req.
- #12- $\frac{3}{4}$ " x 10" x 47 $\frac{1}{4}$ "-Bottom shelf-1 Req.
- #13- $\frac{3}{4}$ " x 10" x 12 $\frac{3}{4}$ "-Shelves-3 Req.
- #14- $\frac{3}{4}$ " x 2" x 25"-Muzzle rest-1 Req.
- #15- $\frac{3}{4}$ " x 10" x 55 $\frac{1}{4}$ "-Center upright-1 Req.
- #16- $\frac{3}{4}$ " x 2" x 52"-Trim-3 Req.
- #17- $\frac{3}{4}$ " x 2" x 48"-Trim-1 Req.
- #18- $\frac{3}{4}$ " x 4" x 48"-Trim-1 Req.
- A-1"- $\frac{1}{4}$ " Round molding-6' Req.
- B-1 $\frac{1}{2}$ "-Cove molding-6' Req.

## DOORS:

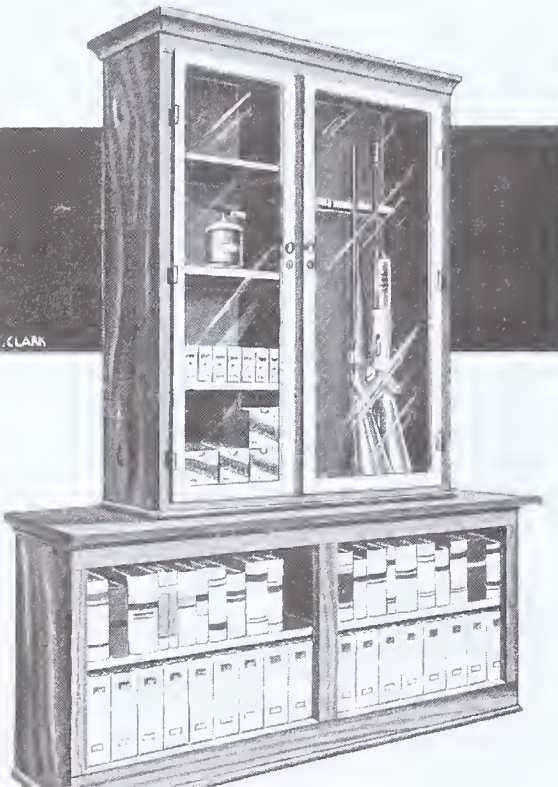
- 4 pcs.-1" x 2" x 50 $\frac{3}{4}$ "-Side rails
- 2 pcs.-1" x 2" x 22 $\frac{5}{8}$ "-Top & Bottom (RH Door)
- 2 pcs.-1" x 2" x 16 $\frac{7}{8}$ "-Top & Bottom (LH Door)
- 1 pc.- $\frac{1}{8}$ " x 15 $\frac{3}{8}$ " x 47 $\frac{1}{4}$ "-Glass (LH Door)
- 1 pc.- $\frac{1}{8}$ " x 21 $\frac{1}{8}$ " x 47 $\frac{1}{4}$ "-Glass (RH Door)
- 24'- $\frac{1}{4}$ " x  $\frac{1}{4}$ "-Molding

## HARDWARE:

- Hinges-3 Sets Req.
- Door pulls-2 Req.
- Locks-2 Req.
- 8 penny finish nails
- Small Brads
- Glue
- Hardboard nails
- Sandpaper (Med. to Fine)
- Shellac
- Varnish
- Plastic wood or wood putty

## Construction

All the dimensions in the preced-





ing list are finished dimensions. Allowance has been made for mortise and tenon joints where required.

Begin by cutting all the parts to size for the book case. Before assembling the cabinet cut a  $\frac{1}{4}$ " x  $\frac{1}{4}$ " groove where needed in order to recess the back (3). This will allow the cabinet to fit flush against the wall. The shelves are already the correct width to allow for this  $\frac{1}{4}$ " recess. Measure and cut  $\frac{3}{8}$ " x  $\frac{3}{4}$ " mortises for the shelves. Then assemble the framework of the case using 8 d finish nails. Position the shelf supports and nail in place. Next cut out and assemble the trim using the  $\frac{3}{8}$ " x 1" x 1" mortise and tenon as shown on the drawing. Use glue and small brads to insure tight joints. When the glue has set, attach the trim to the framework with 8 d finish nails. Attach the top, leaving a  $1\frac{1}{2}$ " over hang on the front and ends. Fit the back in place and nail with hard-board nails. Cut and attach the  $\frac{1}{4}$ " round molding under the top. Use a 45 degree miter at the corners. Don't attach the bottom molding until you are ready to fit the cabinet to the wall. Countersink all nails and fill the holes with plastic wood or wood putty. Then set the book case aside and start work on the gun cabinet.

Proceed as you did with book case by cutting all parts to size. Mortise for the shelves, top, bottom and muzzle rest. Cut a  $\frac{1}{4}$ " x  $\frac{1}{4}$ " groove where needed to recess the back (10). Next assemble the framework temporarily in order to position the guns. Set your guns in place and mark off grooves in the muzzle rest (14). Also trace around the gun butts on part (12). Then remove (12) and (14) and cut out the muzzle and butt

outlines with a jig saw. Now reassemble the framework permanently. Assemble the trim as you did for the book case. Nail the back in place. Attach the cove molding at the top using a 45 degree miter joint at the corners. Let the molding off at the bottom until the two cabinets are fastened together.

Center the gun cabinet on the book case and fasten in place with  $1\frac{1}{2}$ " wood screws. Next remove the base board from the wall that you have selected for your cabinet. Place the cabinet against the wall and check to see that it fits flush. If it doesn't then place shims under the bottom until it fits flat against the wall. Fasten permanently in place with woodscrews. Cut and nail the base board in place. Attach the  $\frac{1}{4}$ " round molding around the bottom of the book case and gun cabinet.

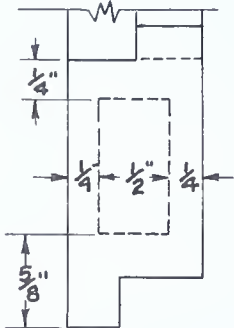
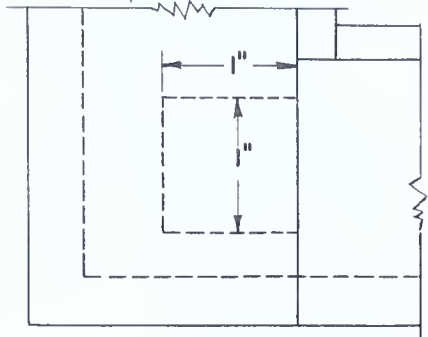
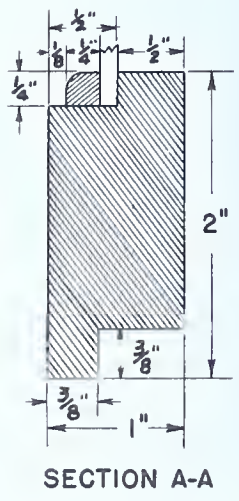
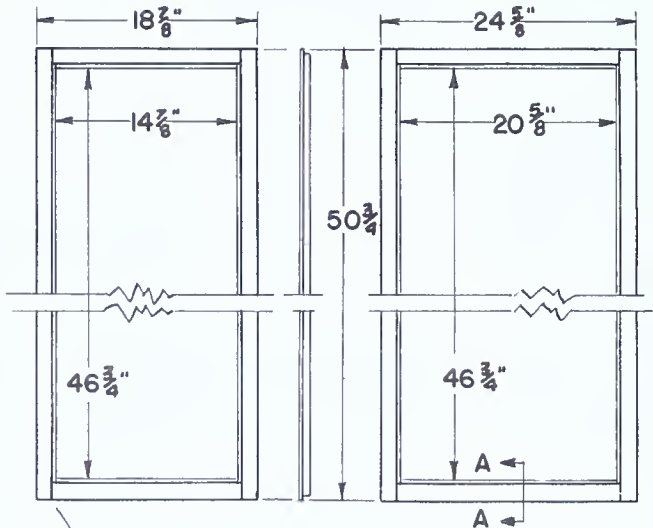
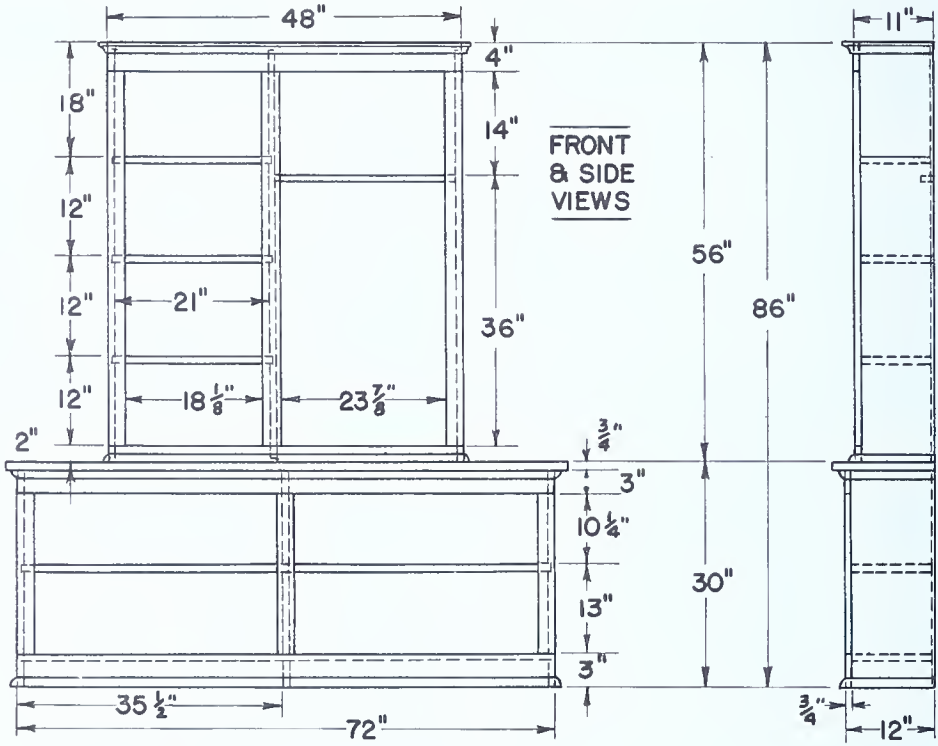
Sand the cabinet thoroughly, starting with medium sandpaper and finishing with fine paper. Then go over the entire cabinet with a vacuum cleaner to remove all traces of dust from the sanding. You are now ready to apply the finish. The finish consists of a coat of clear shellac followed by one or two coats of varnish. Sand lightly between coats.

While the finish is drying on the cabinet, cut out, assemble and finish the doors. When the varnish has dried completely place the doors in position and attach the hinges, door pulls and locks.

This cabinet can be made larger or smaller by altering the dimensions to fit your own individual needs. Incidentally, it's wise to check and double check all dimensions to eliminate any mistakes.

Good luck.

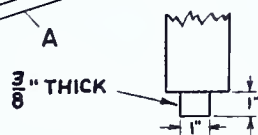
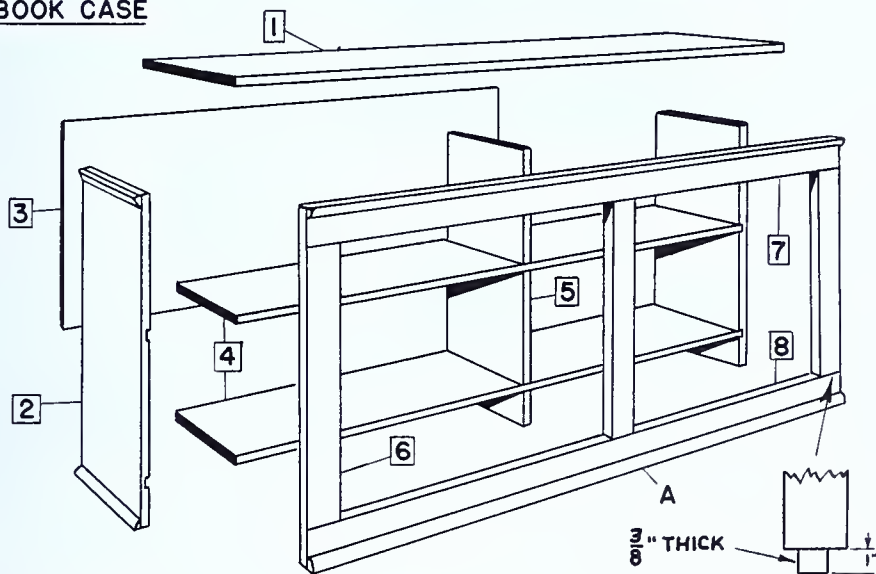




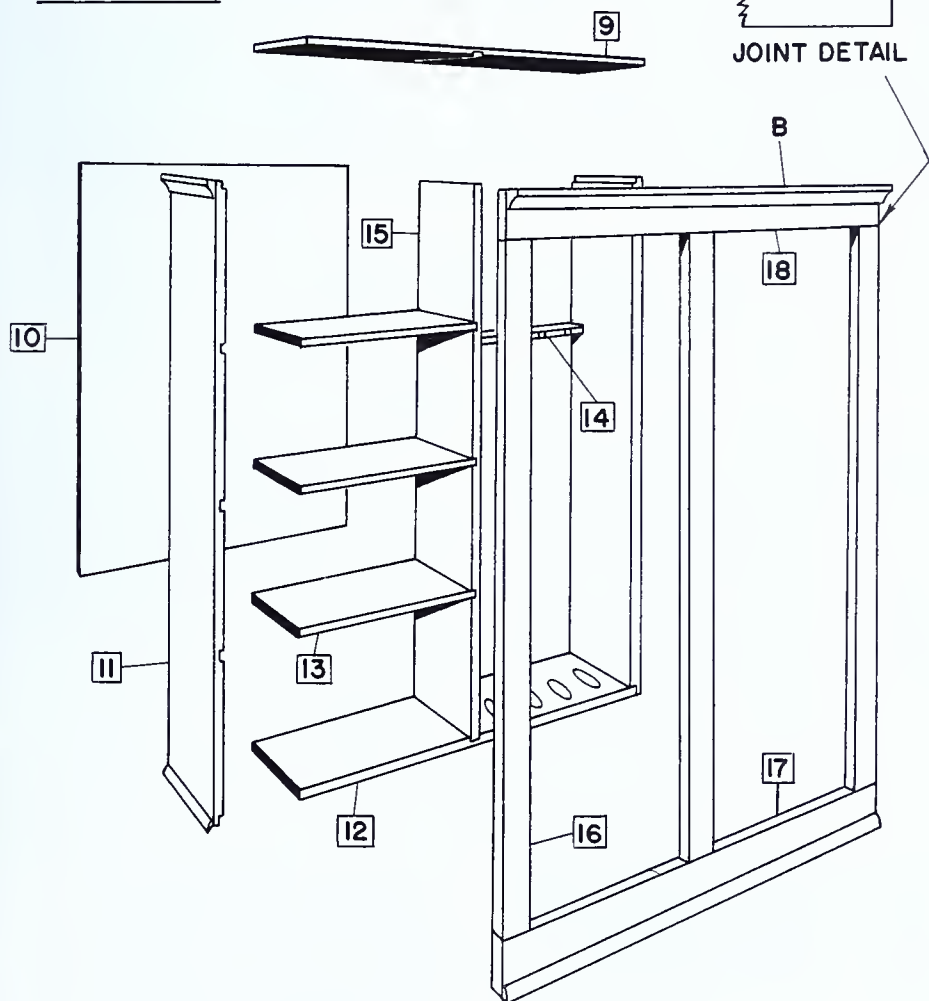
DOOR  
DETAILS



**BOOK CASE**



**GUN CABINET**



JOINT DETAIL



# Classification

By Tom Forbes

**C**OMPETITION is the life blood of sport. Skating, skiing, golf, and archery are all sports in which an individual may become an expert without engaging in competition. However the majority of folks enjoy a challenge and derive considerable pleasure from matching their skill against their fellows. In any group or any sport there must always be one outstanding performer. To provide an incentive for all the rest of

us, handicaps and classes have been established so that we may have an equal chance in competition. In horse racing the fastest horse carries the greatest weight; in track the fastest human runs from scratch, and in golf, players are permitted to deduct strokes from their gross score in accordance with their ability.

Field Archery is a relative newcomer in the field of sports. As originally conceived field courses were not standard and archers shot them more or less as a novelty event. Scores made on different courses did not measure the comparative ability or skill of the archers. Very early it was realized that lacking the element of competition these novelty shoots



soon drew very few participants. Standards were established for field courses. Here the bowmen took a leaf from the golfer's bible and adopted the system which has been proved acceptable for golf courses. Today each field course to attain national recognition must meet certain definite standard requirements. Target sizes and minimum and maximum distances for each shot, and the total yardage of the course are fixed so that a bowman may shoot any standard course and his score should not vary widely from course to course.

To promote competition among groups of archers, classes have been established in which archers are assigned on the basis of their ability and proficiency in the sport. An archer is classified on the basis of scores shot in competition on a twenty-eight target field round. There are five classes ranging from Novice to Open. Perhaps no other phase of the sport has caused so many headaches as has the effort to assign each archer in his proper class. Systems have been devised, tried, revised in the attempt to insure strict impartiality in class assignment. The National Field Archery Association prescribes a method for determining any bowman's class. The system depends for its operation on the local club secretary or a classification committee in the local club. Unfortunately the system requires a considerable amount of work. As a result many clubs adopt their own rules for classification believing that they can achieve the same results with less work. Unfortunately a system that is satisfactory for club shoots invariably leads to dissention when intra-club shoots are held with clubs which do not have the same method of classifying archers.

There is no automatic system which will insure that all bowmen are properly classified. Individuals will always attempt to devise ways to beat any system and at times will succeed. Under the present rules this is

fairly easy. Some "Hardware Merchants," a term applied to a few bowmen who believe that anything goes as long as you can get away with it, consistently shoot scores well below their ability in competitive club shoots so that their average scores will not result in moving them into a higher class. In any important tournament they will turn on the heat and shoot a score above their class to win. However this one score when averaged with the others in which they have held back and not shot their best will not require that they be reclassified to the next higher class. This can go on indefinitely if the bowman is satisfied to remain in one class. A less frequent ruse is at times used. Rules require that an archer who belongs to more than one club shall select from among them a home club. His classification is established by the scores shot at this home club. Since each club maintains separate records an archer may designate more than one club as his home club. Each club will issue him a classification card based on the record of the scores shot at the club. In this way a bowman can have in his possession two cards each showing a different class. At a tournament held by a third club this individual can look the field over and decide which card to present to the club officials. They have no way of checking his card. It is accepted and he goes out and wins. The club may record his score on this card but he has the other one in his pocket and that club does not have any record of his winning score.

A great deal of discussion and a lot of serious study of the problem has been occupying the time of the local club officials regional associations, state bodies, and the national organization. These are natural growing pains of a comparatively new sport. Every sport has to be policed. Rule changes in the old established sports are not uncommon. We are aware that steps must be taken that will



prevent these and similar practices from spoiling our sport and the recent action of the Pennsylvania State Archery Association is designed to stop these practices.

Beginning January 1, 1959 a uniform Official Classification Card will be issued by the state association from a central office. All shoots and tournaments sponsored by the state archery association will require presentation of the P S A A Official Classification Card in order to compete for class awards. Individuals who do not hold such a card will be required to shoot in the Open class. They may compete for top honors in the tournament but they will not be eligible for any class award.

The Official Classification Card will be issued from a central office on the basis of information furnished by the Secretary of the member's home club. Twenty-eight target field

round scores will be required for classification. These must be shot in competition and the classification will be determined from the highest twenty-eight target score. The archer's full name and address and his class will be sent to the central office by the secretary of the member's club. Upon receipt of this information the central office will send direct to the archer his Official Classification Card.

Persons advancing in class at any shoot shall surrender their official classification card to the secretary of the host club and in return shall receive from the host club's secretary a temporary classification card showing the new class and valid for thirty days. The secretary of the host club shall in turn forward the archers official classification card and a duplicate copy of the temporary card to the central office. Upon receipt at the central office a new classification

**OFFICIAL CLASSIFICATION CARDS** for all shoots and tournaments sponsored by the Pennsylvania State Archery System now require presentation of an official classification card by each shooter. Individuals who do not hold such a card will be required to shoot in the Open class, may compete for top honors in the tournament, but will not be eligible for any class award.





Photo by Don Shiner

**NEW PRESIDENT** of the Pennsylvania State Archery Association is Wayne Schuyler, of Berwick. He is shown above looking over a map pin-pointing the location of 141 archery clubs in the state. Pennsylvania now ranks first in the nation with its large number of archers and archery clubs.

card will be sent direct to the archer. A charge of thirty cents will be made to issue a 1959 card except to members of the State Archery Association who shall pay fifteen cents.

In event of loss of a card by an individual a duplicate card will be issued by the central office on request of the individual and payment of a ten cent fee. To prevent certain practices and to provide equal opportunity for all archers, it is necessary that all member clubs of the state association sponsoring shoots shall use this system. Since not all club members are individual members of the PSAA provision has been made so that cards may be issued to non-members in order that they may compete in shoots sponsored by the clubs. Shoots sponsored by the state association which include regional and state championship shoots require that each competitor hold an individual membership card in the state association in addition to his classification card.

To further insure competition on an equal basis the board of governors of the state archery association has ruled that an individual may not be reduced in class unless he or she shall have shot continuous scores in a lower class than the one presently

held for a period of one calendar year and then may be lowered one class and one only upon request to the member's home club officers and approved by them.

The practice known as "sand bagging" will be made increasingly difficult under this system and its immediate adoption by all clubs in Pennsylvania should do much to insure fair competition among all archers. The paper work is simple and the success of the system will depend, as it always does, on the individual club secretaries and classification committees. The system will be a hard one to beat if the proper and up to date information is furnished the central classification office.

The NFAA has proposed the following changes in classes which have been adopted by the Pennsylvania State Archery Association:

#### MEN

Ex AA	.....	400 and over
Ex A	.....	325-399 inclusive
Ex. Bowman	.....	250-324 inclusive
Bowman	.....	175-249 inclusive
Archer	.....	174 and under

#### WOMEN

Ex AA	.....	275 and over
Ex A	.....	225-274 inclusive
Ex. Bowman	.....	175-224 inclusive
Bowman	.....	125-174 inclusive
Archer	.....	124 and under





# Relief From Rabbit Raids

by Don Shiner

**C**OMPLAINTS on rabbit damage are subjects of spirited conversations among landowners during the winter months. Chiefly in winter, when snow blankets the fields, food for wildlife is scarce. Bunnies, left

over from the fall gunning season, scramble about for a meager living and the bark of young trees are gnawed to ease the pangs of hunger. Not infrequently the saplings are young fruit trees growing in newly



planted orchards. Ringed of bark, sap is prevented from flowing upward through the trunk to the branches in the spring and consequently the trees die, the young orchard never materializes. Saplings replanted in the spring receive much the same treatment from the bunnies during the following year.

There are several ways of overcoming this problem of rabbit damage. Wire screening material placed around the trees keep cottontails from reaching the bark, unless the snow drifts to heights which enable the rabbits to reach over the top of the screening. Some spray materials help, but these are removed by winds and rain and soon lose their effectiveness.

Probably the quickest and easiest solution to this problem is the modern household aluminum foils. A sheet of this metal material, two feet or so in length, wrapped around the stem of the young trees provides a protective shield. Rabbits and mice can not and simply will not try to bite through this thin metal. Hence,

fruit saplings and ornamental trees remain unharmed through the winter months. One or two packages of this material will cover a fair size orchard of apple, chestnut or similar trees, and the cost is far lower than either screening material or tree replacements procured in the spring.

Of course, it is best to remove the aluminum foil material in the early spring months. Rabbit damage is least likely to take place than since new shoots, buds and grasses appear everywhere, making food abundant for the needy wildlife. Then too, this reflective metal serves as an insulator and could cause sweating that may have harmful effects to the sapling's stem as weather grows warmer.

Landowners in rural regions and suburban areas can practically eliminate rabbit damage with this household material. Those who have become somewhat disgusted with rabbits gnawing at trees and ornamental shrubs can easily protect their plantings and may soon come to the conclusion that it is nice to observe the cottontail around the premises.

---

## BIRD OF DISTINCTION

A bird of distinction—and discretion—is a black duck drake that has been captured 18 times in the waterfowl banding traps of the Michigan Department of Conservation during the past nine years, the Wildlife Management Institute reports.

An adult when first trapped and leg-banded in 1949, the duck has eluded hunters for at least the past 10 years. Its latest appearance in the trap was on January 31 of this year. Its original aluminum leg band has been worn out and replaced. The banding studies are part of a national effort to uncover facts about the migration habits of waterfowl.

## COOKED OR UNCOOKED VENISON CAN NOW BE IDENTIFIED

The precipitation test has long been used to identify raw deer meat. But until a short time ago the identification of cooked venison posed a problem that vexed wildlife conservation officials.

Now, a new method of establishing that questioned meat is venison, even when cooked or mixed with other meats, provides valuable assistance to game law enforcement officers.

Credit for discovering the procedure goes to researchers at the University of New Hampshire. The method they devised is relatively simple and quite inexpensive. It can be readily mastered by Game Protectors, which is important to the wildlife enforcement program.

## Federal "Duck Stamp" Sales Show Increase in 1958

Although Federal "duck stamp" sales in fiscal year 1958 showed an increase over the previous year's sales, the all-time high record of 2,369,940 achieved in fiscal year 1956 still stands, Assistant Secretary of the Interior Ross Leffler has announced.

A total of 2,355,353 stamps of the 1957-58 issue was sold in fiscal year 1958 to hunters of migratory waterfowl, conservationists, and philatelists, according to final figures supplied by the Post Office Department, the agency responsible for distributing and selling the stamps. This total is 23,339 more than in 1957 but still 14,587 below the 1956 high.

Sales of duck stamps, according to Assistant Secretary Leffler, provide the best available index to the number and location of waterfowl hunters throughout the country.

As an indicator of hunting pressure, duck stamp sales are grouped by waterfowl flyways. The 1958 totals, with the 1957 figures in parentheses, are as follows: Atlantic Flyway, 356,800 (378,753); Mississippi Flyway, 1,004,555 (1,022,695); Central Flyway,

555,525 (491,272); and the Pacific Flyway, 427,799 (428,487).

Individually, by States, California again headed the 1958 list, with a total of 183,011. Other States recording sales in excess of 100,000 were: Texas, 167,385; Minnesota, 151,156; Michigan, 128,131; Illinois, 119,010; Wisconsin, 115,248; and Louisiana, 102,224. Pennsylvania hunters purchased 47,707.

The sale of duck stamps in the Atlantic Flyway states was:

Connecticut .....	8,818
Delaware .....	8,081
District of Columbia .....	2,197
Florida .....	34,117
Georgia .....	11,516
Maine .....	12,700
Maryland .....	27,264
Massachusetts .....	20,543
New Hampshire .....	4,910
New Jersey .....	29,777
New York .....	68,559
North Carolina .....	29,502
Pennsylvania .....	47,707
Rhode Island .....	3,059
South Carolina .....	15,018
Vermont .....	4,468
Virginia .....	25,576
West Virginia .....	2,776
Puerto Rico .....	212

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MARCH, 1959

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# THE STORY BEHIND THE COVER

**E**VERY sport has its champions and stars. They usually earn such recognition by performing some feat a bit above the average, by physically accomplishing the unusual and unique. But most

champions are spectacular only occasionally; they play the game well at all times but thrill the spectators intermittently.

So it is with gun dogs. Of the 30 different breeds recognized by the American Kennel Club, each has characteristic traits—all have something in common. The breed portrayed on this month's cover seldom displays the flash and style characteristics of pointers and setters. Yet it is usually dependable, always hard working, and often stylish.

German short-haired pointers are comparative newcomers to the American game fields. The basic stock of the breed was the old Spanish pointer. A cross with the Bloodhound brought more nose, greater intelligence and better trailing ability. Later, a cross on the Foxhound was used to add speed; still later a cross with the English pointer was made to improve pointing ability.

The result as we have it today is a strong, sturdy gun dog with a keen desire to hunt, a choke-bore nose, medium range and moderate speed. German short-haired pointers make ideal field companions for the sportsmen who prefer to take their hunting seriously but not too fast.

Versatile is the word for this kind of gun dog. He is a jack-of-all-trades but not usually a master of any one. He can be easily trained, is a fairly close worker and makes a fine retriever from land or water. Despite his short hair, he can withstand severe weather and is often used on waterfowl. He is seldom quarrelsome and generally makes a fine family dog. A true workman, he is all business with no fancy frills.

Iwan Lotton, internationally famous wildlife artist who specializes in portraiture of bird dogs, horses and animals, selected Eddyrock's Waggoner for this month's front cover. Owned by Joseph Potenziani of Batavia, Illinois, this seven-year-old German short-haired pointer has chalked up 35 wins, including 17 firsts in field trial competition. Waggoner began to garner honors in shooting dog competition during the spring of 1953 and has been a consistent performer ever since.

Here is a breed that may not display the flair and high style of other champions. But here is also a steady, hard-working gun dog who is highly championed by every sportsman who has ever owned one. For the average hunter desiring a dependable, friendly field companion there is no dog finer than the German short-haired pointer.



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DAVID L. LAWRENCE, *Governor*

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Cover Painting  
By Iwan Lotton

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# While Men Slept

Matthew 13:25  
 "While men slept the enemy sowed  
 tares"

A Sermon by the  
 Reverend Frederick Brown Harris, D.D., LL.D.,  
 Chaplain of the United States Senate

**T**HE instruction in the old red schoolhouses which followed the pioneers as they made new clearings in the wooded wilderness was based on the Three R's: Readin', Ritin', and 'Rithmetic. Without this vital trio in the curriculum of the public schools, the story of the winning of the West cannot be told. As the song has it, the three R's were taught to the tune of a hickory stick. The punitive element in elementary education,

of which the hickory stick on the teacher's desk was a symbol and instrument, cannot be countenanced today under our progressive instructional practices. But no softened methods of pedagogical technique can revoke the penalties which await those who defy the given regulations of behavior in the great School of Life. The hickory stick, part of a growing tree, may still be lifted up in the schoolrooms of America as the emblem of the dire punishment Mother Nature inflicts when the rules of the good earth are broken. Nature's laws disregarded bring desolation to the very ground upon which our schools are built, and rob the generations yet to be of the treasures with which the earth has been stored.

In a penetrating comment on cause and effect, Robert Louis Stevenson declared that soon or late everybody sits down to a banquet of consequences. That suggests the solemn reminder of the Master Teacher that men cannot expect a harvest of grapes from thorns, or figs from thistles. At the banquet of consequences, to



which every person, every nation, and every civilization, in the course of events is bound to come, there may be found on the menu some bitter fruit; and printed on that menu is "You sow an act and reap a destiny." The Creator has put us in a universe which is not whimsical or haphazard but which, while it is all love, is also all law. Confronting lawbreakers on the highway of God's world are angels with flaming swords and no traffic tickets can be fixed.

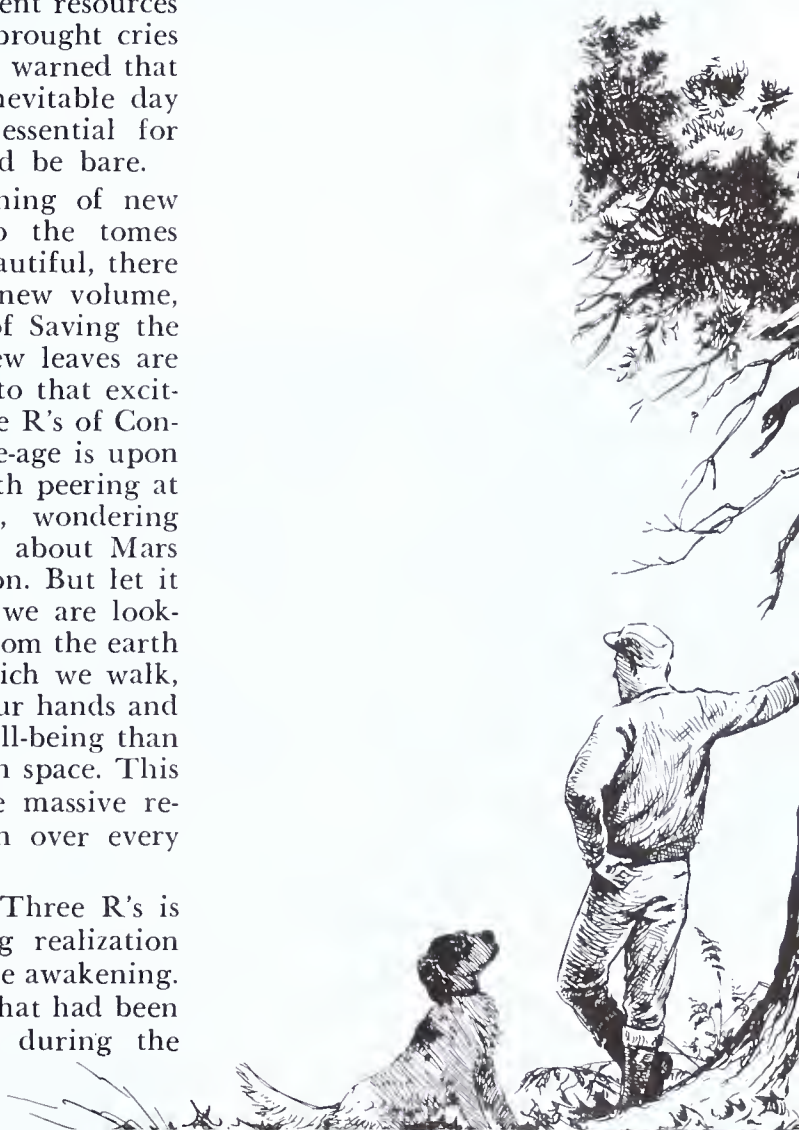
A half century ago some unpalatable and even poisonous products began to appear on the table of our National Banquet of Consequences. Our America was forced to begin to reckon with what was happening to the fair land given to our fathers. Prodigal use of the opulent resources of a continental sweep brought cries of alarm from those who warned that there would come an inevitable day when, in some things essential for life, the cupboard would be bare.

And so, for the training of new citizens, in addition to the tomes lauding America the Beautiful, there began to be written a new volume, entitled, "The Primer of Saving the American Heritage." New leaves are constantly being added to that exciting treatise on the Three R's of Conservation. Now the space-age is upon us, with the eyes of youth peering at far worlds to conquer, wondering with insatiable curiosity about Mars and the face of the moon. But let it always be remembered, we are looking at heavenly bodies from the earth whose surface, upon which we walk, is to a great degree in our hands and more vital to human well-being than a thousand worlds out in space. This stewardship invoices the massive responsibility of dominion over every living thing.

Now the first of the Three R's is *Recognition*. A startling realization was to bring about a rude awakening. A striking example of what had been happening to America during the

years of her stupendous expansion, in terms of bigness, is found in one of the matchless parables of that One who spake as never man spake. Solemnly, He said: "While men slept the enemy sowed tares among the wheat." Applied to the American situation, it could be said that while men slumbered, in ignorance or indifference, an enemy sowed seed which would mar the future—An enemy did something evil to the ground—An enemy entered into a conspiracy against growing things—An enemy was spoiling the music of coming harvests.

Most folks were sleeping in the quiet New England towns when the voice of Paul Revere, galloping





through the night, aroused and alerted them to the approach of the enemy. A modern Paul Revere was Theodore Roosevelt. In his day, as pioneers indiscriminately slaughtered trees and stripped the ground of its grassy covering, as they pushed on and on with the sound of the axe in forests primeval leaving behind depleted soils unprotected and defenseless from the elements, men were saying, "There's enough on this continent to last for a thousand years." Their very methods and attitudes betrayed this complacent belief. But T. R. plainly told his countrymen that they were asleep as to the final significance of what was happening. He asserted that even as they sang rapturously about America's rills and woods and templed hills the enemy—personal aggrandizement, defying nature's laws—was sowing the tares of destruction and desolation while good men slept. Teddy, the Roughrider, rode roughshod over the schemes of those who cared more for their selfish profits than they did for the warning of selfless prophets. He, and others who joined their voices to his, sought

to bring the Nation to the recognition that soil erosion is a frightening process by which our country is being robbed of irretrievable treasures, her life-blood being allowed to go down the drain. In the name of progress the future was being sold literally "down the river" as once crystal waters were turned into sewers of pollution.

In the years since these first sentinels of conservation disappeared from the mortal stage the recognition of a truly alarming situation has become more vivid. Across the expanding years grasping hands, often unknowingly, have unloosed the strong cords which held together the rich land and kept it from tumbling into the sea. Dense forests, guarding the soil, were felled for timber, and the exhausted and denuded lands were then deserted for new conquests of the axe and the plow. That wasteful technique swept across the continent, as westward the course of empire took its way, until now soil erosion is a national calamity. The yellow in countless waterways is the golden deposit of the stored earth. And it is





**WILDLIFE WEEK PROCLAMATION** was signed by Governor Lawrence in Harrisburg on February 6. Participating in the occasion were Secretary of Forests and Waters Maurice K. Goddard, left, and Seth Myers, National Wildlife Week Chairman for the Pennsylvania Federation of Sportsmen's Clubs and M. J. Golden, Executive Director, Pennsylvania Game Commission. Standing, left to right: Everett Henderson and Leslie Secoy, Federation vice-presidents; John Laudadio, Legislative Chairman; H. R. Stackhouse, representing the Executive Director of the Fish Commission; and Chuck Templeton, Mercer County Chairman for Wildlife Week.

taken from the diminishing supply of our basic asset. It is indeed a solemnizing thought that it takes nature from three hundred to a thousand years to bring back a single inch of topsoil.

And so gradually to Recognition was added *Resolution*. The trouble with recognition, even expressed in resolutions, is that so often they really do not get away from the lofty whereas—whereas—to the practical brass tacks of therefore, be-it-resolved. Mere resolutions are futile until they begin to march with grim determination. By vivid descriptions, by maps and pictures, they can expose the devious commercial and political schemes to nibble away at the public parks and wilderness sanctuaries which belong to all the people. Resolutions can be loaded with explosives to reveal and to blow to bits the selfish schemes of those who would desecrate the land to feather

their own nest. If resolutions are furnished with sufficient bells to ring out the alarm, then those who plot to sow tares while the people sleep will be routed and their evil practices unveiled. Back of the resolution to defend the threatened land are many battalions of fighting conservationists. There are outdoor, sportsmen's, garden, and women's clubs; service groups; institutions; nature, scientific, and educational societies; councils; labor and governmental agencies. Through their cooperative efforts to guard our national assets, they now cover the nation with a network of concern, alert to the dangers that threaten the good earth, our most precious national asset.

There is now enough knowledge being channeled through the nation's schools to light the fires of a righteous indignation in the emerging army of youth. But a red light—**STOP**—is not enough. It is not suffi-



cient to just mournfully view the havoc which has been wrought. Of course, it is tremendously worthwhile to halt criminal practices; but to Recognition and Resolution must be added *Restoration* or as it is often termed, Reclamation. As has been stated, some things that have been done cannot be undone. But some resources are renewable. Denuded plains can be reforested. Where protecting trees have been wantonly murdered the shoots of new life can spring up. Farming methods which squandered the topsoil can be changed to those that hold it and enrich it. In the animal life, the passenger pigeon is extinct—one of the victims of America's sleeping sickness. But the vanishing buffalo, once the lordly denizen of the West, is being brought back. The antelope, because the alarm was raised in time, will continue to inhabit the land. The battle is on to save from oblivion the whooping crane, a noble creature, the yearly count of whose offspring has become a national concern.

Water, that elixir without which life cannot be sustained, is needed in enormous amounts to meet the rapid growth of our population, the expan-

sion of industrial plants and urban developments. Impervious pavements now cover hundreds of square miles of ground that once drank up the ample moisture. The loss of this flow can only be adequately compensated for by scientific common sense and a cessation of wanton waste. Conservation suggests a hundred ways by which there can be at least partially restored the "years that the locusts have eaten."

For this holy purpose every school in America must become a recruiting station for Conservation, for the drilling of Minute Men under the banner of the Three R's—Recognition, Resolution, and Restoration.

On every blackboard and on the cover of every textbook—especially on the Primer of Conservation, with its Three R's—might well be written, so that every teacher and every pupil would have it ever before their eyes "HERE IS YOUR COUNTRY. Do not let anyone take it or its glory away from you. Do not let selfish men or greedy interests skim your country of its beauty, its riches or its romance. The world and the future, and your very children, shall judge you according as you deal with this sacred trust."

---

## Federation Begins Distribution Of 1959 National Wildlife Stamps

The National Wildlife Federation has announced that its 1959 series of Wildlife Conservation Stamps now is going into the mails for distribution all over the continent to people interested in nature.

Printed by a six-color lithograph process, the 1959 stamps depict 35 species of birds, mammals, fish, plants and one reptile. Scenes on the stamps are painted from real-life settings and are suitable for use as mounted decorations and in album collections as well as upon correspondence.

The artwork was prepared under the direction of Roger Tory Peterson,

one of the world's best known wildlife artists and author of the famous "Field Guide to the Birds." Other artists contributing to the 1959 stamps include Carl Burger, Al Kreml, Don Eckleberry, Bob Hines, Maynard Reece and Michael Bevans.

Wildlife Stamps have been issued annually since 1938, when the first series was painted single-handedly by J. N. (Ding) Darling, noted newspaper cartoonist, conservation leader and first president of the Federation. Contributions received in exchange for the stamps help finance the educational programs and conservation projects of the Federation which, since incorporation in 1937, has become the nation's largest conservation organization.



# The Secret of Lord's Valley

By Gene Coleman



**P**ENN'S WOODS seem to beckon to the sportsman with the promise of crystal exuberance and the thrill to opening the doors to some of the mysteries of nature. And while the forest and fields may unfold some secrets to those observant and patient enough to learn, there are some things the big woods keep jealously guarded.

The answers to some of these secrets take many years to unveil. Others remain locked forever in the timberland's embrace.

Take the case of George Franks a young Philadelphia hunter who slogged into the woods of Pike County, his enthusiasm high with the hope of downing a trophy buck.

That was more than eight years ago. George Franks never returned to his cabin. He vanished as silently as the December daylight on the day of his hunt and although he was the target of one of the most intensive searches in this part of the nation he was never again seen . . . dead or alive.

The case of George Franks began routinely enough. Just another missing hunter. But today it still remains one of the major mysteries of Pennsylvania's woodland tales. No one except the big woods has the answer so far as is known.

Going back in time, December 4, 1950, dawned cold and bleak, heavy with the promise of snow in the leaden sky over Lord's Valley in a remote area of Pike County. Well known to big game hunters for its excellent hunting, Lord's Valley is sparsely populated except for hunter's cabins, summer retreats and few isolated farms. It is situated about 35 miles due east of Scranton.

George Franks was 21 years old, an

average hunter out to enjoy a few days in the woodlands with his father, Jerome, a member of the Philadelphia Police Department. Married and the father of an infant son, George Franks and his family had moved into their own home about three weeks before his hunting trip. Up into Northeastern Pennsylvania for the deer hunt with George and his Dad were Myrle Bollinger, William MacBride and G. Charmar, all of Philadelphia.

The party was quartered at Scarlet Oak Hunting Camp near the big game lands.

Early on the morning of December 4, 1950, George Franks and his father tramped out of camp in a cold, pelting rainstorm. They hunted for a few hours until, wet and weary, they returned to their cabin. Later, the elder Franks set out again, first arranging to meet his son at a point where they turned back from their earlier quest for the wily whitetail.

Much later, the father returned to camp after his son failed to appear

at the pre-arranged meeting point. George Franks was still missing several hours later.

But, with only a brief period of daylight left, apprehension began growing at Scarlet Oak Camp and natives of the area who serve as hunting guides during the deer and bear seasons advised Mr. Franks to drive his car along back roads skirting the area where he left his son and keep sounding the horn.

It was dark when the telephone jangled at the State Police Substation in Milford, about 15 miles east of Scarlet Oak Camp. Corporal Glenn James answered the phone and began hurriedly jotting down the usual pertinent information which comes as second nature to men of his profession during the hunting season.

"Another lost hunter," he commented almost casually to another leather-putteed trooper as he went about making the arrangements for a search party.

By this time, the pelting rain had turned to an enveloping swirl of

START OF SEARCH for the still missing George Franks brought State Police, Civil Air Patrol, Air Force and volunteers together in a massive effort to locate the young hunter.







SEARCH SECTORS were assigned to Civil Air Patrol pilots by Colonel Neuweiler, of Allentown. These men served as airborne eyes for the army of ground searchers who combed Lord's Valley in Pike County for the hunter who disappeared mysteriously eight years ago.

snow. All of the standard procedures were used for locating a lost hunter. Shots were fired into the air, car horns blew incessantly, police sirens wailed and searchers shouted while others fired flares high into the air. No one was too excited at the time.

George Franks, it was felt, would be found. Wet, cold and miserable, perhaps, but he would be found. They always are, the men thought as they crashed through the deepening mantle which filtered down through the denuded trees.

With the searchers was a man long recognized as one of the most experienced woodsmen in that part of the country, State Game Protector John Lohmann, who recently retired after a long and distinguished career in the service of the Commonwealth.

But not a trace of George Franks was found that night. By next morning, Game Protector Lohmann and Corporal James had organized an even bigger party of searchers.

Tension was beginning to mount now since eight inches of snow had piled up over silent Lord's Valley during the night and any tracks which might have been left by George Franks were now obliterated.

Word of the manhunt spread and the search party grew in size. Tension began to give way to outright fear. Several private pilots in the Pike County sector threw their efforts into the search and became the airborne eyes of the ground parties. Another day went by, and still another. By now more than 100 searchers pushed through the snow covered timberlands of Lord's Valley.

Fred Kellogg, then Pike County sheriff, offered the assistance of his office and deputies. Others joined in.

And so it went for nine solid days. Veteran trackers, aerial observers, ground searchers, flares, sirens, gunfire . . . all were used fruitlessly. But George Franks appeared to have

vanished into the evergreen-scented air of the forest.

By December 15, newspaper accounts of the search began reading—"Hope waned today that George Franks . . ."

Question after question came to the minds of the searchers. Had George Franks been hurt, panicked or could he possibly still be wandering in circles?

Where was his rifle? It seemed impossible that he did not leave some kind of trail; but where was it?

Finally, the big, organized search was halted temporarily but day after day hunters, hikers, trappers and those living in and around the back woods kept a vain vigil for some trace of the missing Philadelphian.

About two months later—in early March of 1951—State Police and the Civil Air Patrol began planning a massive air and ground search. The heavy snow proved too great an obstacle to the earlier searchers and so they waited another three weeks for the first sunlit spasms of Spring to crack the hard-packed snow.

Then, on April 6, 1951, a small army of men and machines waited with military-like precision to launch one of the most intensive hunts in the history of Pennsylvania. Among the anxious faces gathered for the task were those of Mr. and Mrs. Jerome Franks who made the trip from their home at 404 East Upsal St., Philadelphia, with fear gnawing at their hearts. George Franks' wife waited with the same fear. They all knew there was little chance they would ever find the young hunter alive. But if only the mystery of what had happened to him could be solved!

On the morning of April 7, the small army moved out into the deep woods. More than 700 ground searchers, 40 airplanes, a helicopter and trucks along back roads swung into action. It was estimated at the time that at least \$2,000,000 worth of equipment was on hand for the search.

They called it "Operation Pike County."

A fine tooth comb search of more than 25 square miles with the searchers including Game Commission officers, State Police and volunteers. The main force comprised CAP ground and air teams and special Ranger units. Overhead, the planes hummed busily, their pilots and observers scanning the ground through binoculars. The CAP planes came from the entire eastern section of the state, comprising the First, Second, Third and Fourth Areas of Air Rescue Service, Pennsylvania Wing Command. In charge were Col. Philip F. Neuweiler, Allentown, Pennsylvania Wing Commander, and Lt. Col. John W. Mills, Scranton, Pennsylvania Wing executive officer.

Bolstering this huge force was a team from the U. S. Air Force Air Rescue Service at Westover AFB in Massachusetts. The planes shuttled back and forth in patchwork patterns, keeping in constant radio communications with the ground searchers. They took off and landed like busy hummingbirds from Scranton-Wilkes-Barre Airport, midway between the two cities; from Westover Field and from a tiny landing strip at Mountain Park Airport in Paupack.

For a full weekend the gigantic search party pressed in a ground wave through Lord's Valley and hummed overhead. The searchers ate in field kitchens, slept in the open and attended Sunday services under tarpaulins in the early morning.

Mute testimony to the thoroughness of the search for some trace of George Franks could be found in what some of the teams brought back after literally turning over every stone and poking into every cave.

From their pockets they emptied a one-fingered, left-handed mitten, a rusted, homemade hunting knife, a 32 caliber shell casing and a milkedewed magazine. They uncovered strips of paper left as trail markers



months before by previous search parties. Bones of every description were gingerly fished from rock ledges, crevasses, caves and buggling woods springs.

All of the bones were found to be those of animals. None of the other items were found to have any connection with George Franks.

And so, the big hunt ended with the disappearance of the Philadelphian still cloaked in mystery.

Almost a year went by until January 14, 1952, when the missing hunter's family received word he may have been spotted in Lock Haven, a possible amnesia victim. The spark of hope was fanned into flame again but flickered out when a check in Lock Haven proved that George Franks was not there. A similar report came from Hollywood, Fla., but that, too, led to nothing positive.

Ultimately, news of the search for

the young hunter died out. Then, after about five years, his name cropped up again. It was April 20, 1957, when 13-year-old John Gray of Glen Ridge, N. J., discovered parts of a human skeleton in Lord's Valley. He found a skull and other bones in Shohola Creek and speculation reopened on the fate of Franks.

Game Protector Lohmann and Corporal James, the case still "open" in their files, hurried to the area. It was two days before it was determined that the bones were not those of the missing man.

It was found that the bonees came from an old burial ground which almost a century before was hastily filled when an epidemic hit a lumbering camp. It was theorized that the bones were washed up in the ravaging floods which struck Northeastern Pennsylvania in August, 1955, and they apparently lay in Shohola Creek afterward.

AERIAL VIEW of the search party who sought the elusive answer to the secret of the big Pike County woodlands. The search was one of the largest and best organized of any conducted in Pennsylvania.



And now, more than eight years later, the disappearance of George Franks remains where it was on the day he walked out of Scarlet Oak Camp.

What of his unexplained vanishing? Why is it that not a single strand of evidence has ever been found to give some clue to his fate? Well . . .

Game Protector Lohmann said shortly before his retirement last October: "We're still treating the matter as a 'lost hunter case.' We found nothing to indicate George Franks had been shot, hurt or otherwise injured. We combed that area like it has never been searched before," the veteran woodsman and game protector said.

"There is some quicksand in the area," Lohmann pointed out, "and it is possible he went down in it. But I'm convinced that his natural instinct of self preservation would have turned him toward higher ground and taken him away from any quicksand.

"What I can't figure out is why nothing—not even a trace of him—has been found by other hunters and trappers. Not his rifle, not even a strand from his hunting jacket which might have been pulled away by rodents to their nests," Mr. Lohmann puzzled.

"There're some who feel George Franks may be still be alive . . . I wonder?" the Game Commission law enforcement office said.

And Corporal Glenn James? Well, he has threaded his way through many a strange case in a long police career. But what about George Franks?

"Officially, the case is still open," he says. "What we can't figure out is why no trace at all has ever been found of him. Certainly, after eight years—with hunters in Lord's Valley year after year—you'd think something would be found.

"But people around here still have



GEORGE FRANKS, the still-missing hunter who disappeared in Lord's Valley. The picture was made shortly before he vanished without leaving a trace.

the case fresh in their minds," the corporal said recently. "In fact, even to this day they still bring in anything they think might be a clue which will give us the answer to what happened to George Franks," he said.

The husky trooper echoed Game Protector Lohmann's description of the wilderness area. "There's several big bogs and swamps in there," he said. "We cut poles and sank some of them as deep as 20 feet while we were looking for him. It isn't impossible that his body may be at the bottom of one of those swamps."

And, with a patience born of long experience, Corporal James sums it up this way: "You never know; someday something will probably turn up."



Finally, what about George Franks' family? What do they think? His father has this to say:

"It seems more like 800 years than eight years that he's gone. We still have hope. You always have that.

"But we do know that the chances of ever seeing George again are not one in a million but one in a billion."

Mr. Franks says that even to this day they still get reports that their son has been spotted at one place or another. "None of them has ever checked out," the Philadelphia father said.

Mr. Franks said his son's wife remarried about a year ago. The infant he left behind is now a bustling eight-year-old boy.

Is it possible that George Franks is alive, a victim of a lost memory? Possible. But then, how did he get out of Lord's Valley without being seen or leaving some trace? After all, you don't travel far wearing hunting clothes and carrying a rifle even around sparsely settled areas without attracting some attention.

Or, as is most generally believed, did he perish in the big Pike County woods in a manner known only to himself? If this is the case, why hasn't a single strand of evidence ever been found which would lead to his remains?

Is the answer to the secret still in Lord's Valley and if it is will the forest ever unfold the answer?

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**PAYMENT OF BOUNTIES—**After a full discussion of the predator situation and with particular emphasis on the advisability of continuing the payment of bounty on Red and Gray Foxes during the open hunting seasons, and upon motion made, seconded and approved, the following resolution was adopted:

### RESOLUTION

WHEREAS, After giving due consideration to the present predator population;

THEREFORE, BE IT RESOLVED, That the Pennsylvania Game Commission, acting under the power and authority vested in it by the provisions of Article XI, Section 1101 of the Game Law, by resolution adopted this 8th day of January, 1959, hereby directs that for the fiscal year beginning June 1, 1959, the bounty payments authorized for the birds and animals enumerated below, if killed in a wild state in any County of the Commonwealth during the period specified and presented in the manner and under the conditions stipulated in the Act aforesaid, shall be as follows:

Gray Fox—\$4.00 for each gray fox killed during all months, except that such bounty on gray foxes be discontinued with the open-

ing date of small game season, whatever it may be, and remain so through November and December.

Red Fox—\$4.00 for each red fox, killed during all months, except that such bounty on red foxes be discontinued with the opening date of small game season, whatever it may be, and remain so through November and December.

Great Horned Owl—\$5.00 for each great horned owl, adult or fledgling, killed during all months, except that such bounty on great horned owls be discontinued with the opening date of small game season, whatever it may be, and remain so through November and December.

BE IT FURTHER RESOLVED, That the foregoing Resolution shall be duly published in accordance with Section 1102 of Article XI of the Act aforesaid in the February and March issues of the PENNSYLVANIA GAME NEWS, also to be brought to the attention of the public by news release and other sources of public information; and

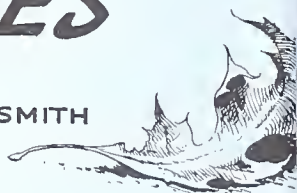
BE IT FURTHER RESOLVED, That the Executive Director is hereby authorized and directed to certify the foregoing as an act of the Pennsylvania Game Commission.

M. J. Golden  
Executive Director  
Pennsylvania Game Commission



## WALKIN' SHOES

By NED SMITH



# The Puddle Ducks are Back

1. What puddle duck nests in hollow trees?
2. The gadwall appears in great numbers on the Susquehanna River. True or False?
3. What duck is called the spoonbill?
4. What duck is considered the wariest of all?
5. What puddle duck is called the sprig?
6. Which is our smallest duck?
7. The puddle ducks generally feed by diving. True or False?
8. What puddle duck wears a white collar?

**K**EEP an eye on the rivers and ponds these days. The blustery weather might bear little resemblance to Spring, but the wild ducks are already heading northward. From now until May they'll be drifting through.

It's not hard to get excited about wild waterfowl. That comes naturally to anyone who enjoys the outdoors. What is difficult is to know one duck from other, especially at a distance. Ducks have a way of looking alike to the novice.

One of the best ways to simplify identification is to first determine to

what group the specimen in question belongs—pond or "puddle" ducks, diving ducks, or mergansers. Once a duck is assigned to a certain group it is much more simple to identify it. Of course, as one becomes better acquainted with the various species he will dispense with this preliminary step.

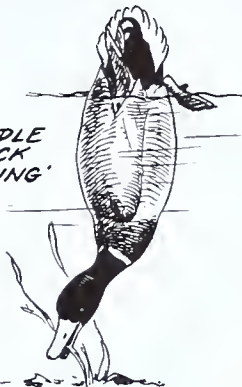
The differences between the puddle ducks and the diving ducks are usually discernable in the field. Divers have smaller wings, beat them more rapidly, and generally fly closer to the water. When taking off puddle ducks spring vertically into the air—divers, with one or two exceptions, patter along the surface for some distance before becoming air-borne. Puddle ducks usually feed by "tip-ping," standing on their heads in the water with their rear ends protruding above the surface. On the few occasions when they do dive they do so clumsily and with considerable splashing. Divers, on the other hand, feed almost entirely by diving, which they accomplish with little effort or splash. On the water the puddle ducks float buoyantly with their tails quite clear



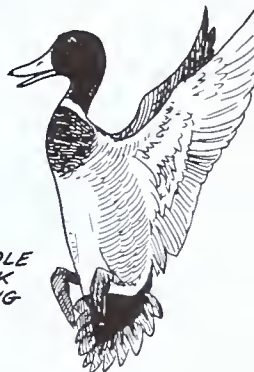


BILL OF A MERGANSER

PUDDLE DUCK FEEDING



PUDDLE DUCK TAKING OFF



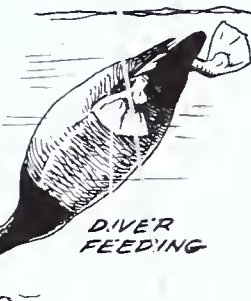
PUDDLE DUCK ON THE WATER



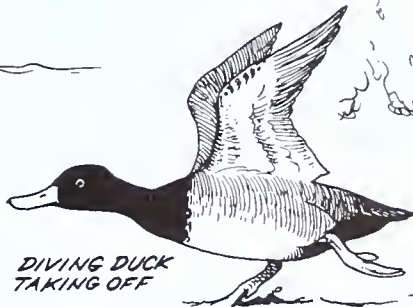
DIVER ON THE WATER



DIVER FEEDING



DIVING DUCK TAKING OFF



NED SMITH

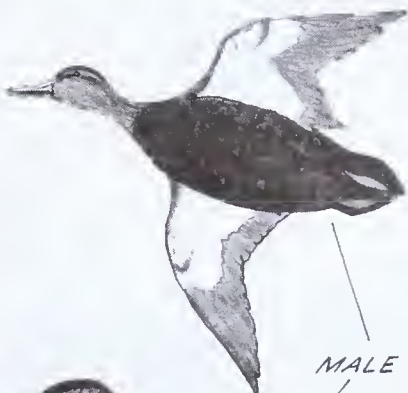
of the water. Divers generally float with their tails awash or touching the water.

The mergansers can be distinguished by their slender bills, in contrast to the broad bills of other ducks. In all other respects they could be grouped with the diving ducks insofar as field identification is concerned.

The following illustrations and descriptions cover those puddle ducks appearing in Pennsylvania. On the water, at least, the females are for the most part mottled, non-descript, look-alikes that can be quite troublesome. Fortunately, they are usually accompanied by drakes of their own species, which makes identification easier.

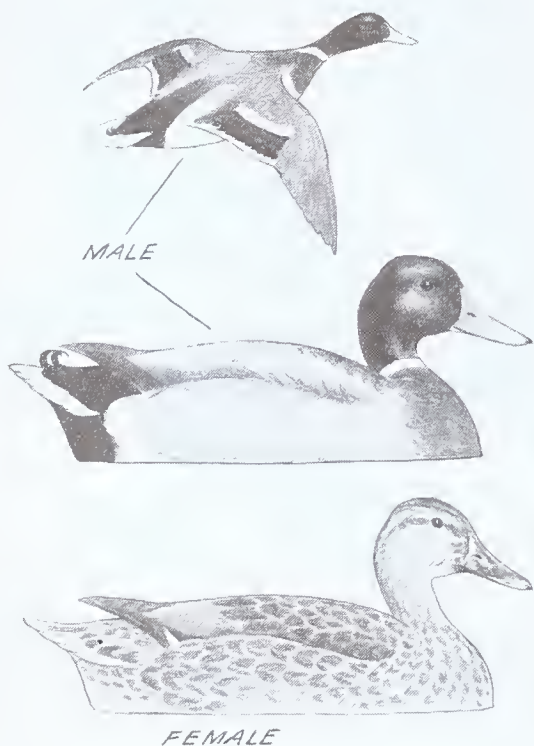
**1. Black Duck.** This large duck is sooty brown with a paler head and neck. The body feathers are edged in buffy, those of the head and neck streaked with black. Feet vary from dusky to red. The bill is yellow, olive in young birds and hens. The speculum, an iridescent patch on the rear half of the wing, is purplish blue. In flight the black duck can be identified by its uniformly dark body and white under-wing surfaces. Except as noted the sexes are not noticeably different.

This bird is generally conceded to be the wariest of all wild ducks. It is one of the few species to nest in Pennsylvania.



MALE

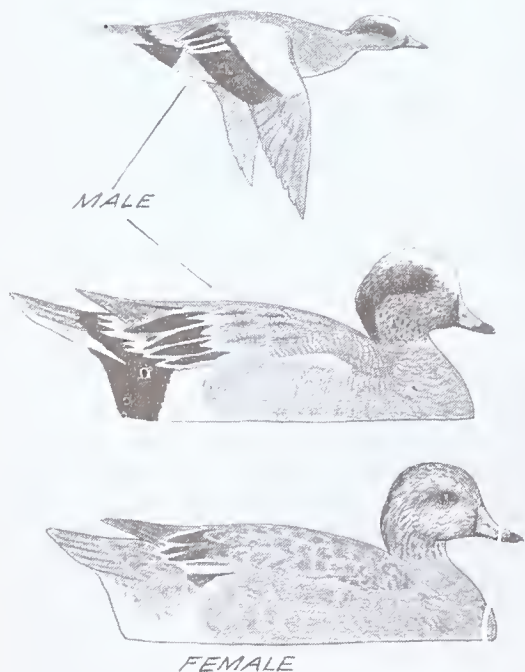




2. **Mallard.** The handsome "green-head" is essentially a large gray duck with an iridescent green head, a white collar, and a chestnut brown chest. The legs are orange, the bill yellow, the wings grayish brown with a blue speculum. The latter is bordered by two white bands. The central black tail coverts terminate in a tight curl.

The hen is a mottled brown bird with a whitish tail. Her speculum is identical to that of the male. The feet are orange, the bill spotted with dusky.

The mallard nests in numbers in Pennsylvania and huge flocks winter here as well. The domestic mallard is almost identical to the wild bird, except that it is larger.



3. **Baldpate.** The baldpate drake is a plump, pinkish-brown duck with black tail coverts, a white patch on each flank, a white crown, and a short bill. A small white dash usually shows at the bend of the folded wing. The female's body is somewhat browner and lacks the white crown and dark green eye patch of her mate.

In flight both sexes can easily be recognized by the large white patch on the forward part of the wing. It is the only puddle duck so marked.

Afloat baldpates rest lightly on the water, pivoting prettily as they feed. Their presence is often advertised by the drakes' loudly whistled *whew*.

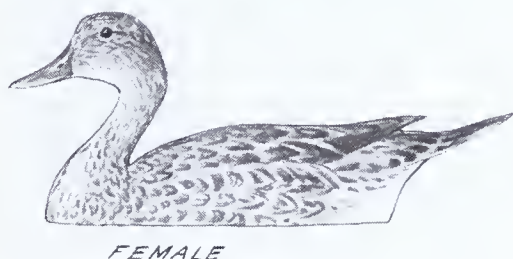
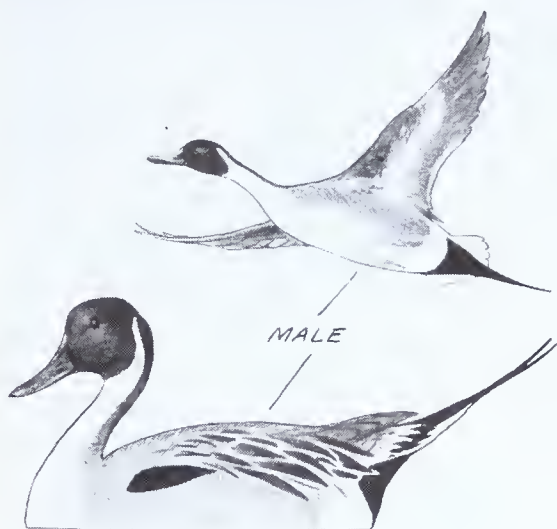
In Pennsylvania the baldpate is commonly called "widgeon." The closely related European widgeon, a rather rare visitor to this continent, is a gray bird with a reddish brown head and cream crown patch.



**4. Pintail.** Unfortunately, not all wild ducks are as easily identified as the handsome "sprig." The drake's slim body is largely gray and white. His dark coffee brown head and slaty bill surmount the longest neck possessed by any of our ducks. The tail coverts are black and, as the name implies, the central tail feathers are long and pointed. No other Pennsylvania duck has the slender appearance of the pintail and only the old squaw, a squatty diving duck, has a similar tail.

The hen is attired in the mottled brown plumage common to so many female ducks, but her long neck and long (for a hen) tail should clinch identification.

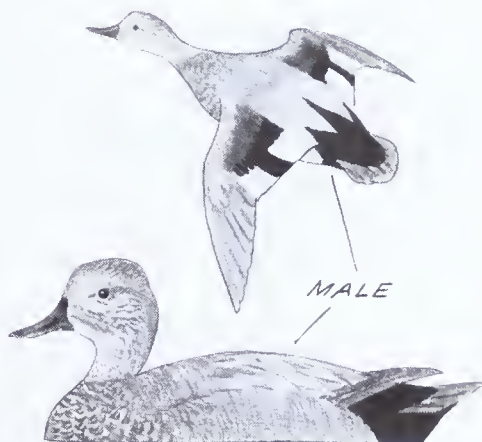
In flight pintails are sleek and racy. At rest they are elegance personified. They sit on the water proudly, slim tails elevated and necks carried in graceful swan-like curves.

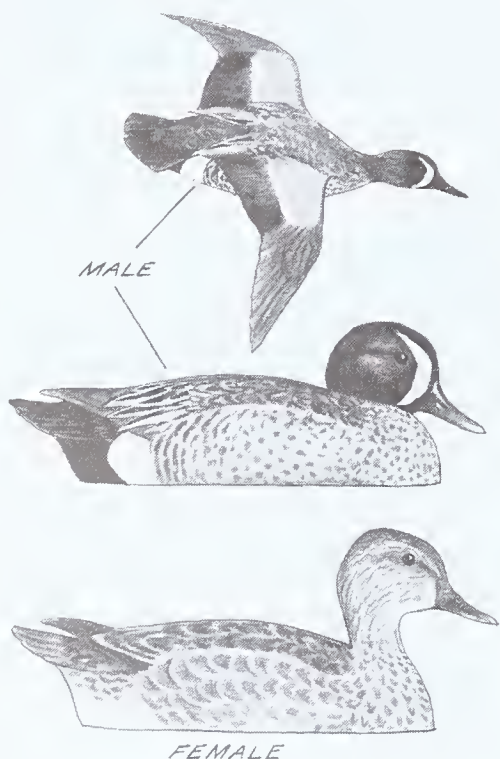


**5. Gadwall.** The gadwall drake is a brownish-gray bird with a paler head and neck. The black tail coverts are the only markings discernable on a distant swimming bird, although at closer range the pale orange edges of the long scapulars (the feathers along each side of the back) and the mottled chest feathers are unmistakable field marks. The female is a mottled brown bird.

At a distance gadwalls might be mistaken for baldpates, although they rest lower in the water and do not have the baldpate drake's white flank patch.

On the wing they are unmistakable. No other puddle duck has a white speculum. The gadwall is rather uncommon in Pennsylvania.





**6. Blue-winged teal.** This tiny duck is among the last to arrive in the spring. The drake's head is dark gray with a conspicuous white crescent in front of the eye. The back is gray, the feathers edged in buffy. The longer scapulars are black streaked with buff. The breast and sides are pale cinnamon thickly flecked with black spots. A prominent white flank patch appears ahead of the black under tail coverts.

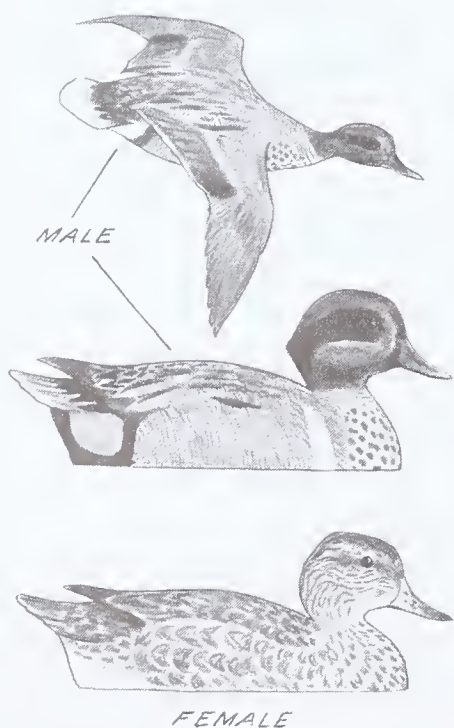
The female is a mottled brown bird that can scarcely be distinguished from other teals when on the water, but in flight both sexes display a large pale blue patch on the forewing like that of the shovellers.

Teals fly in close formation, wheeling and turning this way and that at truly remarkable speeds.

**7. Green-winged Teal.** Measuring about fourteen inches long the green-wing is our smallest duck and certainly one of the most beautiful. The drake is predominantly gray. His crested head is chestnut with an iridescent dark green eye patch and a black area on the nape. The sides are gray, marked with a vertical white stripe in front of the wing. The chest is pinkish-buff peppered with round black spots.

The hen's plumage is the usual mottled brown type. Both sexes have an iridescent dark green speculum.

Bird watchers should check every green-winged teal to be sure they are not observing one of the rare European teal that occasionally visit our waters. The latter lacks the white bar on the sides of the chest but has instead a horizontal white stripe above the wing.



**8. Shoveller.** The extremely large, black bill is an excellent field mark common to both sexes. On the water the drake is easily identified by his



white breast and flank, chestnut breast and sides, and dark green head and neck. No other puddle duck shows so much white with the possible exception of the totally different pintail. In flight the pattern of the underparts is distinctive.

The mottled female can be readily distinguished by her oversized bill. In flight both sexes display a forewing patch of pale blue, similar to that of the blue-winged teal. The large bill gives these birds the appearance of having their wings placed farther astern than other ducks.

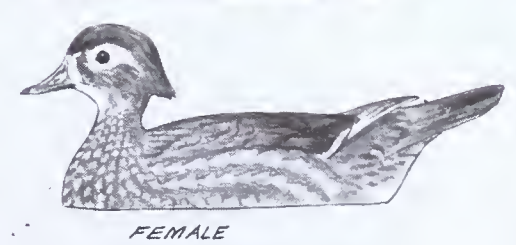
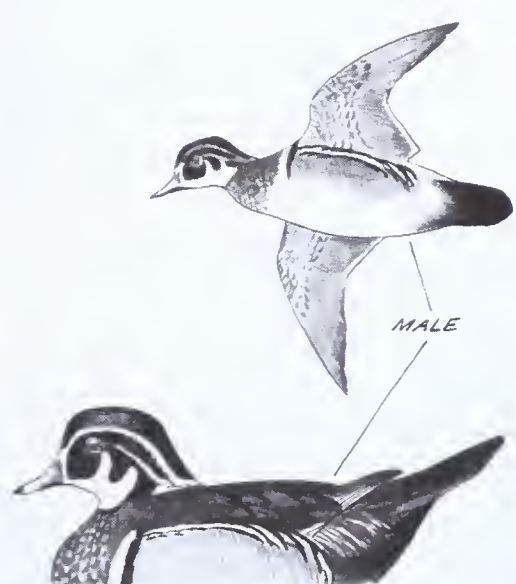
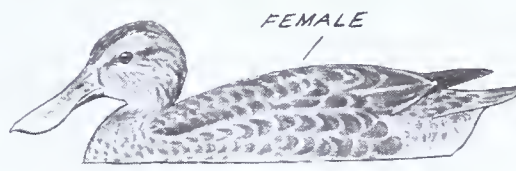
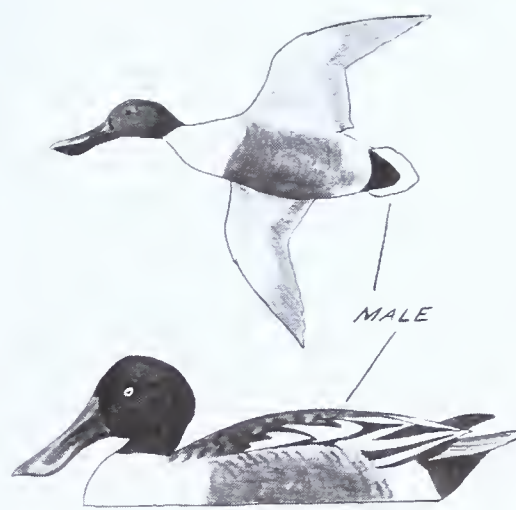
**9. Wood Duck.** Naturalists and outdoorsmen agree that the wood duck drake is America's most gorgeous duck. His gracefully crested head is a riot of iridescent green, blues, purples and bronzes, strongly marked with white. The back and tail are iridescent greenish black, the flanks purplish-chestnut. The sides are buff, finely vermiculated with black and bordered with black and white. The purplish-chestnut chest is streaked with rows of white dots and bordered to the rear with a white and black bar.

The female is generally grayish-brown. Her chest is iridescent and dotted with pale spots, her back glossed with purple and green. A teardrop-shaped white eye ring and crested head are distinctive field marks.

In flight both hens and drakes can be identified by their long tails and the downward angle of their rather short bills.

**ANSWERS TO THE QUESTIONS**

1. The wood duck.
2. False. The gadwall is one of Pennsylvania's rarest ducks.
3. The shoveller.
4. The black duck.
5. The pintail.
6. The green-winged teal.
7. False. Puddle ducks usually feed by tipping or dabbling.
8. The mallard.





Haunted Hunting Grounds . . .

## The Bridge on Kinzua Creek

By Don Neal

**I**T was in June of 1925 that I asked Jim Brown how the hunting was on the headwaters of Kinzua Creek. He and I had been fishing the stream at Red Bridge, about ten miles above the town of Kinzua, and from what I could make out at that point the stream turned away from civilization right about there and headed off into what seemed to be an unending wilderness. Always one to be interested in the far-off, back-in-the-woods places, and an inveterate hunter of the back country, this interested me, so I asked Jim if he had hunted the country that lay upstream. He had, and his account of it was enough to keep my blood at a boil all through the summer months and bring it



close to the vaporizing point with the approach of small game season.

At the time I was living in Clearfield, some sixty-odd miles from the Kinzua as the crow flies, but a darn sight further by the rough, rutted roads we were blessed with in those days. Making a trip to my "dreamland" was a far cry then from breezing there as we could today, but undaunted by the hardships I faced, I loaded my gear into the Model T and headed for Jim's place. I got there the night before grouse season opened and we spent the time, away into the wee hours of the morning, planning our hunt and speculating on what we assumed would be its fabulous outcome.

Before dawn the next morning we drove over to Mt. Jewett, and following the road from there, descended into the valley of the Kinzua at a little town called Kusheequa. We drove upstream from there to where the road came close to being impassable. Then we parked the car and, just as the light of dawn was getting its full strength, loaded our guns, pulled on extra woolen shirts we had brought along, and with Jim leading the way started to hike on up the valley to where he thought we should start to hunt.

It was a grim morning. One of those cold, miserable days when the whole world seems gray and a fellow has a hard time working up enough enthusiasm to keep him going at all, let alone hunt for game. But I managed to keep plodding along at Jim's heels, my eyes glued to the rutted road as I stumbled along it, for the next half-mile or so. Then I almost walked right in to him when he stopped. I was about to jump all over him for stopping so suddenly when I saw that he was looking skyward and had the oddest look on his face that I had ever seen on his old weather-beaten countenance. I looked up too.

I still remember how I felt, but I don't remember what I said. If past and present performance had anything to do with it I must have uttered a cuss word, or maybe a whole string of them. For I was astounded—amazed—flabbergasted. My mouth had dropped open and I must have stood for quite a while just looking. Finally, I turned to Jim. Somehow he guessed the question my unmoving lips were trying to ask.

"It's the bridge," Jim said.

"The bridge?" I asked, as I again looked up, almost overhead, to where a great steel framework stretched up

**BRIDGE LEVEL** appears to be at the top of the world. Actually, it is located at one of the highest spots in Pennsylvania.



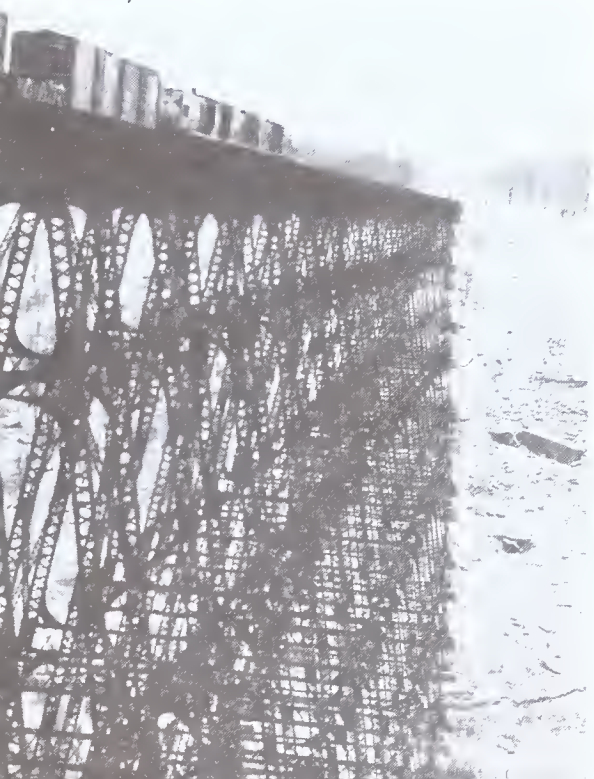
and away as if it must reach all the way to the Pearly Gates.

"Sure," Jim answered, "the Kinzua bridge. Ain't ye ever heard of it?"

I'd heard of it. My father had worked on the structure in 1900 when the original steel towers were replaced by the more modern network of steel fabrication that now rose above me, and he had told me many stories about it. But he had also told me stories about Jack the Giant Killer and Paul Bunyan. Somehow, my boyish mind had relegated all of his stories to one and the same category and I had never anymore expected to see the fabulous Kinzua bridge than I had expected to some day shake hands with legendary Bunyan. But here it was in front, or rather above me, and all I had to do was look.

And look I did. And while I looked many of the things my father had told me about the great structure came rushing back to my mind and I had little trouble convincing myself

**INTRICATE STEEL FRAMEWORK** supporting the Kinzua bridge is clearly seen here. The second highest railroad bridge in the world crosses 301 feet above the valley floor.



that dad had stuck pretty close to the truth when he told me how high the bridge was. That was one thing I had always questioned a little bit. The fact that it was at that time, and still is, ranked the second highest railroad bridge in the world was a point I had somehow missed. But as I stood there gazing into the sky the point came back to me along with a dozen other facts and I relished each of them in turn.

But Jim and I, at the time, were in the valley and many of the things my father had told me concerned the bridge-floor which was, I have since ascertained, some 301 feet above me. I ask Jim how I could get there and he told me that at the base of the bridge there was a path that led up to track level and if I was darn fool enough I could climb my way up to the top. That was just what I intended to do. I wouldn't have missed seeing the top of that bridge for anything in the world.

But when we had reached the base of the bridge, after a short walk from the spot where I had first seen it, and I was ready to start the climb, I found that Jim didn't share my enthusiasm. When I tried to coax him to go with me he shook his head emphatically. No, Sir! he told me. He had come to hunt bird, and hunt bird was what he intended to do—in the valley. Knowing Jim as I did, I knew that that was that, so I arranged to meet him at the foot of the bridge at lunch time and started my climb up the mountainside.

I suppose I had been sitting at trackside for about an hour and straining my eyes across the bridge as I watched for a train to come, when I saw a man start on to the bridge from the far side. Where he had come from I didn't know for I hadn't seen him at all until he stepped out on the catwalk. But I remember watching him as he approached, and marveling at his nerve as he swung blithely along across the high span toward me. If only I could



do that, I kept thinking. But when he had come out on my side of the bridge I understood why he had been so unconcerned about crossing the bridge. He was a trackwalker.

We waved to each other while he was still on the bridge. And when he came off he came over to me.

"How are ya?" he asked.

"Fine," I told him.

Then we fell to talking about the bridge and I found he was quite well acquainted with its history. He said that the original bridge had been built by Oliver W. Barnes, chief engineer of the New York, Lake Erie and Western Railroad in 1882. That it had been considered as an engineering impossibility to cross this valley with a bridge at that time, but that Barnes had went ahead and put one across that was supported on twenty individual steel towers. It was a practical structure and served the line until 1900.

However, from the beginning the high winds that caught the bridge were a constant threat to it and with the rolling stock getting heavier it was decided in 1900 to replace it with a fabricated steel span that would be more worthy. This was done, and as I have said, my father worked on the bridge at this time. But if high winds were a problem with the original bridge, when they had to impose a speed limit of five miles per hour on the trains crossing it, it was more of a problem with the modernized one. The first year it was blown three inches out of line. Cargo was blown out of open cars and the roofs were blown off of box cars. This, though, was due mostly to an increase in the speed limit.

As my friend talked, telling me of the fabulous bridge, it was easy to understand why in the Gay Nineties it was a famed focal point for hundreds upon hundreds of railroad excursion trains. Why thousand upon thousands of tourists flocked to its out-of-the-way location just to gaze



INSPECTION COMMITTEE visits the famous structure to plan ways of saving it. Now that the railroad line is being abandoned, the bridge faces destruction.

upon it and revel at its height. Even today they run excursion trains to it, there were two during the past summer, and hundreds of tourists still walk the mile or mile and a half to get to its site. And regardless of the fact that it was some thirty-three years ago that I talked with my trackwalker friend the bridge is just as fabulous today as it was then.

But what is more important is that the hunting on the headwaters of Kinzua Creek is better now than it was then. I mean that. There is a wider variety of game now and I don't know that it isn't just about as plentiful as it was the day Jim Brown and I hunted for grouse and I found the bridge. We did get a bag of grouse that day, though, along with the delightful experience of seeing the Kinzua bridge. Maybe you could do the same for yourself sometime if you load your gear in the back of the station wagon and take off for the headwaters of the Kinzua Creek. Believe me, Bud, you'll see country—huntin' country.

# Sportsmen's "Mister President"

By Brooke Focht

Outdoor Writer, Reading Eagle

OSCAR A. Becker—Berks County's "Mr. Organized Sportsman"—retired from his job as a sales engineer for the Parish Pressed Steel Division of the Dana Corporation in Reading on December 31. But in so doing, he probably found little time for relaxation, "rocking-chair style." The well-known sportsman is presently serving as president of the Pennsylvania Federation of Sportsmen's Clubs and also president of the Pennsylvania Division, Izaak Walton League of America—the two largest groups of organized sportsmen in the Keystone State.

Becker's life, in fact, parallels the story of the organized sportsmen's movement in Pennsylvania. He joined the Berks County Chapter, Izaak Walton League, shortly after it was formed in 1933 and became its second president. He also headed the "Ikes" again in 1935.

The Reading native was among the founders and served as the first president of the Federated Sportsmen's Clubs of Berks County in 1936. From a small beginning this "grass roots" group of Pennsylvania Dutchmen has grown into the largest county in the nation numbering 45 clubs with more than 16,000 sportsmen enrolled.

Oscar Becker has represented Berks County in the Pennsylvania Federation of Sportsmen's Clubs since 1936. And he has never missed a state federation convention in all those years!

His first office above the county level was as chairman of the Southeast Division of the state sportsmen's federation. He held this office for three years, was out for three years,

and then returned for three additional years as division chairman. Becker later served as a state federation vice president. During the years he has served on just about every state federation committee.

Becker was elevated to the state federation presidency in 1946 and served two years. Ten years later, after the death of the late Judge Grover C. Ladner, Becker was elected honorary president of the Pennsylvania Federation of Sportsmen's Clubs. He is only the second man in the history of the organization to be named to that position.

Judge Ladner had been the spark-plug of the Schuylkill Valley Restoration Association, a group of conservationists who are credited with pushing the cleanup of the polluted river. Becker was also active in this group.

Becker also serves regularly on the state federation resolutions committee and generally conducts a portion of the state federation business sessions. He has served as a delegate from Berks to the state Izaak Walton League conventions on several occasions.

An ardent deer and pheasant hunter, Becker also has fished all over Pennsylvania and sections of Canada. His favorite spot is Kakabonga Lake in Quebec. Here he and some of his cronies have fished for great northern pike and lake trout for the past 15 summers.

Becker's favorite hunting companion for almost 15 years was "Mickey," an English setter. The infirmities of old age finally made it necessary to have this prized member of the Becker household put to



sleep. Becker has not yet gotten a replacement for the setter.

The Reading steel salesman has covered countless thousands of miles via trains and airplanes on his job. But he still loves to travel and hopes to continue to do so after his retirement.

Becker was born in Reading on December 19, 1893, and was graduated from Reading High School in 1911. He was first employed as a draftsman for Parish Pressed Steel in 1944, later served as man in charge

of the engineering department for 10 years. Since 1929 he has served as a sales engineer in the sales division of the firm. He completed 44 years' service with the firm last June 1.

Oscar and his wife, the former Bessie A. Heinly, have been married 43 years. They reside at 419 Sunset Rd., West Reading. They have three children: Frances, at home; Richard of Wilmington, Del., and Frederick of Oakmont, Pa., and seven grandchildren.





### Deer Roping Champion

**SOMERSET COUNTY**—During the past antlerless deer season the following story was related to me by an unknown hunter. He was watching a large field with binoculars when several deer came into view at the far end of the field. Suddenly a young boy emerged from the field edge, shot at and hit one of the deer. The deer kept on going across the field with the youth in hot pursuit. At the edge of the field the wounded deer became entangled in a wire fence. When the young nimrod finally reached the deer he had expended his supply of ammunition. He stood momentarily and pondered the situation. He then took the "drag" rope from the back of his hunting coat and proceeded to truss up his quarry and tie it fast to a fence post and fill out his big game tag and tie it on the deer's ear. By this time the other hunter came over to investigate and the youngster asked him if he could borrow his rifle to finish the job he had so laboriously commenced.—District Game Protector Eugene Utech, Confluence.

### Rabbit Rebound

**ARMSTRONG COUNTY**—At a check station held on Rt. #839, Armstrong County on December 27, 1958, one interesting fact about the rabbit population turned up. Approximately twenty-five vehicles containing seventy-five hunters were checked. These hunters averaged better than two rabbits per man. Only one auto with two men went through the station without any game. This kill should indicate that we had plenty of rabbits even during what seemed to be a dull regular rabbit season.—District Game Protector Charles Hertz, Rural Valley.

### Still Too Many

**FAYETTE COUNTY**—On December 15, while patrolling SGL #51, vicinity of Chalk Hill, Dunbar, I met Deputy Game Protector Wendell E. Pike of Smock, R. D. who had just killed a doe. The size of the deer indicated it was born in September; the spots had barely disappeared. Examination of this deer showed it was in poor condition. Still having my doubts as to whether or not this deer would survive the winter, permission was gained from the deputy to check the marrow in the deer's front leg. Sure enough the marrow was between pink and red, the next stage to starvation. For the next two days particular notice was taken of the deer browse. To my amazement, deer were feeding heavily on laurel and rhododendron indicating an over-population of deer in this specific area in relation to food supply.—District Game Protector A. J. Ziros, Connellsville.







### Little Stinker

**SOUTHEAST DIVISION**—During the past deer season, Douglas Filbert of Bernville had a new experience. While sitting on watch for a deer, he saw two skunks. One of them came right towards him. Doug tried to get out of its way, but the skunk kept right after him. Although he did not want to shoot for fear of scaring away the deer in the area, Doug was finally forced to fire a shot in self defense.—Land Manager Samuel McFarland, Centerport.

### Heavyweight Championship

**POTTER COUNTY**—On December 9th while on patrol with Game Protector Stidd in Homer Township, we came upon a Golden Eagle holding a hen turkey down in the ditch at the side of the road. The eagle was frightened off when we approached and the turkey got up and ran over the bank at the side of the road. After a little investigation, we discovered that the eagle had attacked the turkey on the bank approximately 50 feet from the road. Both turkey and eagle had lost a lot of feathers and there was one spot of blood in the ditch, but she seemed to be strong enough when she ran down the bank.—Student Officer Richard Feaster.

### There's A Big, Expensive Difference

**ELK COUNTY**—During the past deer season I had three elk illegally killed in the Dents Run and Winslow Hill sections of Elk County. Two of the elk were recovered and the third one, a large bull, was left lying in the woods. By the time this elk was reported to me, it was spoiled. When I went into the woods to investigate the killing of the large bull and after seeing the condition of it, I am convinced that it was killed during the bear season. I recovered the head from it and I had it hanging at my headquarters for some time. A lot of the people who came to view its large antlers asked me how in the world could a person mistake one of these for a deer. Coming from the mouths of the two men who paid fines for killing them, the answer is very simple and negligent. One of the men who had killed a bull during the buck season said he saw horns so he shot. The other man who killed a cow elk during the antlerless season said he didn't see any horns, so he shot. I for one am glad that this is the modern age and that we don't have to use horses to get around anymore. I am certain that with the attitude of some of our modern day hunters that there would be a lot of fresh horse meat laying around in the woods.—District Game Protector Fred H. Servey, St. Marys.



### All In Play

**WESTMORELAND COUNTY**—Game Law investigations sometimes take an unusual twist. Such was the case in the following alleged violation: One evening I received a call from a person who informed me that the night before, which was Sunday, he and his wife witnessed a man throw a spotlight on a hen pheasant, while a boy, believed to be his son, got out of the auto and shot at it twice.

"Was the bird killed?" "No, but it jumped when the boy shot at it the second time," and, the informant added, "Even after I stopped and reprimanded him for the unlawful act, the boy shot again, and the man just sat there in his auto and laughed at me."

He agreed that he and his wife would appear as witnesses should I decide to prosecute the "culprits" and furnished me with the license number of the auto the pair were in.

The following day the auto registration was checked with State Police and a deputy and I proceeded to the residence of the alleged violators.

Upon knocking at the door, it was opened by a lady who admitted to being the wife of the man we were asking for—but he was working. I identified myself as a Game Protector and she stated, "I know why you are here. I've been expecting you."

She then proceeded to the other side of the room, picked up a gun and added, "Here's the weapon the

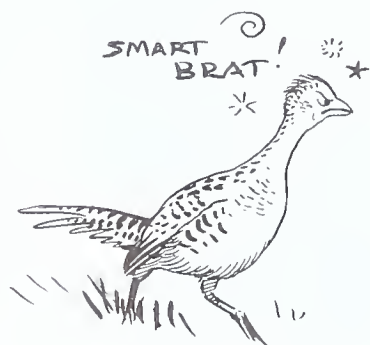
shooting was done with. My son got it for Xmas." I took the gun and examined it—a CORK gun! The little eight year old fellow who done the shooting was standing by and added, "I didn't even have corks in it."—District Game Protector J. M. Maholtz, Mt. Pleasant.

### Prancer And Dancer

**WAYNE COUNTY**—Wayne Olver of Damascus, Pa., was on the receiving end of a deer highway accident this December, after the close of the antlerless season. He was headed north on a highway when he noticed a deer approaching head-on but to the left side of the road. Mr. Olver slowed down, expecting the deer to break to the left and vanish in the woods. However, the doe fawn headed directly for the auto and at the point of contact, gave a leap and landed feet first on the hood of the auto. After demonstrating a Fred Astaire dancing routine, the doe gave another bound and disappeared over the windshield. Only a handful of hair in the hood ornament and a few minor scratches remained as permanent damage.—District Game Protector Fred Weigelt, Honesdale.

### The One That Got Away

**NORTHEAST DIVISION**—I have heard many fish stories about the one that got away, but not so many hunting stories. This past season a man while hunting ringnecks shot one and put it in his coat. About noon, four hours later the party sat down to eat and the gentleman wished to admire his ringneck and show it. This time the ringneck promptly flew off. Nine shots were fired at this bird, and yes, you guessed it. The One That Got Away.—Conservation Information Assistant John Behel, Wilkes-Barre.





*SOME FIRE-POWER, EH!!*



### Blue Blazes

**YORK COUNTY**—The first day of the 1958 antlered deer season, a hunter was hunting in the vicinity of the Hanover Water Company Impounding Dam. Shortly after the opening hour, he spotted a fine buck. Next following was the usual excitement and the increased blood pressure of the hunter. Then the usual barrage of rifle fire. When the smoke cleared, there was no dead deer, but considerable other smoke. He had shot off a high voltage power line, which in turn started a forest fire making lots of smoke. The local fire company was summoned to extinguish the blaze, "and keep an eye on that hunter." Many residents of the community were without electrical power for several hours all over an innocent deer.—District Game Protector G. D. Kirkpatrick, York.

### Lucky Buck

**LACKAWANNA COUNTY**—During October Deputy Game Protector Karabin observed an incident which indicates why such large numbers of deer are killed by cars and trains. Deputy Karabin was working in the Taylor Railroad Yards and a long freight train was moving through the yard at a speed of about 20 miles per hour. As he stood there waiting for the train to pass a buck and 3 does

bounded up to the moving train and stopped. The deer moved around nervously in an apparent desire to get on the other side of the train. Finally the buck appeared to make up his mind and dashed under one of the moving box cars. The does, possibly having better sense, remained standing till after the train had passed and then crossed the tracks. Deputy Karabin walked up to where the buck had crossed expecting to pick up the mangled remains of the deer. However, luck must have been with the buck because no deer was visible. Evidently it had made the hazardous crossing safely. — Game Protector Stephen A. Kish, Avoca.

### Ceiling Zero

**FULTON COUNTY**—On the first day of doe season, in Fulton County, Game Protector Jarrett and I checked a carful of hunters parked near an open field. The morning air was cold, and five heavily clad hunters huddled inside the auto. The windows of the car were so heavily frosted that we could not see in, nor they out. When the door was opened and we identified ourselves, the first words to greet us were: "Where's all the deer? We haven't seen a single deer all morning!" Conditions as they were, I doubt if they could have seen an elephant, unless it—as we—had opened their car door.—Student Officer Mervin Warfield.





# Black-Powder Rifleman

By Bob Bell

**I**N THESE days of ever-increasing velocities in the shooting game, brought about by new powders, different loading methods, higher pressures, etc., it comes almost as a shock to realize there are many shooters in this country who devote their time and efforts toward making muzzle-loading rifles shoot more accurately than most of us would believe possible. One of the most successful of these is Donald Coble, who lives a few miles outside of State College, Pa.

By vocation Coble is a tree surgeon and has been employed in this capacity for twenty-eight years by the Pennsylvania State University; by avocation he is a shooter who specializes in round-ball muzzle-loading rifles. His efficiency in this field is shown by several dozen beautiful trophies, innumerable first-place scores, and record targets in at least seven matches. Included in this is the title of National Muzzle Loading Rifle Champion, which he has won on six occasions.

Coble's interest in muzzle-loaders developed early and he acquired his first one, a Remington Zouave .58 caliber Civil War rifled musket, at fourteen. He tried hunting with this gun, using shot loads, but this was unsuccessful due to the rifling. However, he still has it—along with some fifty other muzzle-loaders collected through the years.

But it is a long ways from a youngster's naive interest in shooting to National Champion, and Coble is the first to give credit to those who helped and encouraged him when he was beginning. In 1938 he met Lew Cowher of Tyrone, who writes the "How" column in *Muzzleblasts*, the official organ of the National Muzzle Loading Rifle Association, and "Bull" Ramsey of Portsmouth, Ohio. These men put him in contact with Ben Hawkins, a top gunsmith of Cincinnati, who relined a percussion rifle to .372 caliber for Coble, then helped him to get proper moulds, bullet-seater, patching, powder, and sights so his rifle would be suitable for competitive shooting. Coble joined the



NMLRA at this time and has been a member ever since.

In the summer of 1938, Coble and some friends went to Marietta, Ohio, where he met "Red" Farris, Walter Cline, and other authorities in this type of shooting. Among them was D. C. Addicks, another first-class gunsmith of Rome, Ga. Coble had Addicks reline another barrel, this one to .45 caliber, and it proved so accurate that he used it for some years as his favorite prone-rest rifle, although it weighed only 12 pounds. At the National Shoot in Dillsboro in 1938, Coble fired a 92 x 100 with this rifle to win the Bolles-Brendamour Cup. This match consists of ten shots, prone-rest, at 100 yards using open sights.

Also in that year, the Squirrel Rifle Match was fired for the first time. This match limits the rifle to ten pounds, .40 caliber or less, open sights. Coble's winning score, fired at fifty yards from rest, was a 47-2X, which stood until 1948 when Coble himself surpassed it with a 48-2X. This still stands as the record after twenty years of shooting.

In the past twenty years Coble has attended most of the large muzzle-loading rifle shoots. The National Matches are held in Friendship, Indiana, but there are others in Lima and Canal Fulton, Ohio; Cos Cob, Connecticut; Ticonderoga, New York; Shartlesville, Lewistown, Somerset and Tyrone, Pennsylvania.

Coble often uses an old muzzle-loading rifle as the foundation for a suitable match rifle. When the bore is damaged or rusted beyond repair, it is common practice either to re-bore and re-rifle it to a larger caliber or to reline the barrel. In some respects the latter method is better for it allows the use of a modern steel liner in place of the old soft steel of the original barrel. Relining is done by drilling a smooth hole through the bore, removing all previous rifling, and inserting a rifled blank of

the chosen caliber which is machined to be a slip-fit in the hole. This liner is tinned and sweated into place. In theory this is a simple job; however, such a procedure calls for considerable gunsmithing ability, and if not done properly the rifle will not yield suitable accuracy.

Coble owns six rifles that Addicks has either barreled, relined, or re-bored and re-rifled and all are very accurate. In addition, Alvin Wagner of Jackson, Mo., has relined two .40 caliber barrels for offhand rifles and two .50 caliber barrels for bench shooting. Coble also has two .48 caliber barrels by Weichold, one of which is relined, and he thinks the work of these three men is absolutely top-grade. The scores fired with their barrels give some indication of this. For example, one of the Wagner barrels at present holds the record in the Mike Fink twenty-five yard off-hand match—a 49-2X score—and in 1957 Cobles son, Jim, then ten years old, used this rifle to fire a 47-2X and

MUZZLELOADERS get their name from the fact that they are always loaded from the muzzle rather than the breech. Here Coble pours a measured charge of black powder into the bore.





DON COBLE pauses before shot to dope out wind. The gun is an under-hammer percussion type, stocked in beautiful curly maple.

take the Ladow Johnston Trophy Match. One of the Weichold barrels helped Coble win the 1949 National Championship Trophy.

With so few present day shooters being familiar with muzzle-loading rifles, some words about them may be of interest. Generally, they are divided into two classes: flintlock and percussion. These may be further broken down into rifles that shoot round balls and those which shoot slugs or bullets of some design. Coble has used all of these, but his primary interest is in those handling the round balls.

The name suggests the type of ignition used. In the flintlock, a piece of sharp flat flint is clamped in the outside hammer and, when the hammer is released by touching the trigger, the flint strikes a piece of metal called the frizzen and throws a shower of sparks into the pan. This ignites a small charge of powder which leads through the vent hole and ignites the main powder charge.

In percussion rifles, a percussion cap replaces the flint and steel. It fits over a nipple with flash hole leading to the powder charge, and when struck by the hammer acts much as a primer in a modern cartridge. It would seem that this should provide a more uniform method of ignition

than the flintlock, but Coble has obtained equal accuracy from both when used on the bench. Doubtless the percussion cap would be superior in a hunting rifle as it would be less affected by weather.

As the name signifies, these rifles are loaded from the muzzle, not the breech. With the butt on the ground and the barrel held in the crook of an elbow, a measured charge of black powder is dumped into the bore. The granulation chosen depends on the caliber, those under .45 usually working best with FFF, those above .45 favoring FF. Best accuracy is often obtained when the weight of the powder charge is equal to half the weight of the ball. Such loads should be used only in guns in first-class condition, though. Next, the patch is moistened with saliva and laid on the muzzle. The ball, cast of the purest lead obtainable, is laid sprue-up on the patch. Both are then forced into the muzzle with a specially designed wooden mallet. The excess patch material is trimmed even with the muzzle end, and a wooden ramrod is used to seat the ball. It is important to use the same amount of pressure on the rod each time, so far as possible, as this affects ignition and burning rate which in turn affects accuracy.

Since it would be impossible to force a groove-diameter ball into the barrel without deforming it badly, balls should be cast to a diameter which will give a slide-fit in the bore. Coble has found this will measure within plus or minus .001" of bore diameter. He has also found that best results are obtained if grooves are about .006" in depth, but not to exceed .010" under any circumstances.

Since the slug will not fill these grooves, something must be inserted to make a gas seal and keep the ball from contacting and being deformed by the hard barrel. This is the function of the patch. When you come right down to it, it is the patch that makes a muzzle-loading rifle prac-



ticable. Through its use a shooter can combine the ease and quickness of loading of the smoothbore with the accuracy of a rifle.

At various times many materials have been used for patches, including buckskin and even fish skin, but Coble has found almost any strong, closely-woven cloth is suitable provided it is of the correct thickness to fill the grooves. Bed-ticking which has been softened by washing is a good choice for many rifles, but only trial and error will select the best for any given barrel. As patch lubricant, the majority of target shooters prefer saliva. Most of them have experimented with various liquids, greases or oils, and perhaps one of these would be chosen to prevent rusting in a hunting rifle which might be carried loaded for days at a time, but otherwise saliva seems the simplest and best.

It is very important not to damage the patch when loading. This is easy to do, especially if the lands at the muzzle end are sharp, and it always results in a wide shot due to gas leakage. Many target shooters slightly bevel the lands at the muzzle to lessen this possibility but this must be done with care or it will cause inaccuracy.

Outside of the clan, muzzle-loading experts are perhaps not as well known as they should be. But when Raymond Camp was assembling *THE HUNTER'S ENCYCLOPEDIA*, published in 1948 by Stackpole and Heck in Harrisburg, he asked Coble to contribute the article dealing with muzzle-loading shooting. This alone shows that Coble stands at the very top in his field, for he was placed with some of the best-known gun writers in the country. For those who have more than a casual interest in the subject, this article will provide a great wealth of detail and be especially useful to a beginner.

Probably the question of most interest to shooters is: What is the ac-

curacy potential of a muzzle-loading rifle? This will vary with individual rifles, of course, and obviously it would be unfair to compare a ten pound hunting rifle with a forty pound bench-rest. But Coble says given a good rifle with loads developed to suit it, top-grade aperture sights, ideal weather conditions and an experienced shooter, and groups at fifty yards can be expected to average about an inch in diameter and those at one hundred yards about two inches. This may not equal the claims of some fiction writers, but it is based on observation and study of many thousands of targets, not on fancy.

A well-known gun writer once stated in print that he did not believe any muzzle-loading rifle in existence could average under one inch for a number of consecutive groups at fifty yards, even with perfect weather conditions. When Coble read this he thought he would try it to satisfy his own curiosity. On the first suitable day he shot ten consecutive five-shot groups with one rifle (50 shots), then shot ten more groups with a second rifle (50 more shots). This made twenty five-shot groups. His average was well under an inch.

EFFECT OF WIND is shown on this target being examined by Coble. There are four tens and a six here. The wide shot is right on line but in muzzleloader shooting, shots are scored from center of bullet hole, not inside edge.





JIM COBLE shows real championship ability in firing a heavy flintlock, stocked in curly maple, under the watchful eye of his muzzleloader champion father. The Coble family came close to sweeping the 13th Annual Match at Fort Ticonderoga in 1957.

In fact, the largest group was scarcely over that size and some were well under it.

Actually, this compares favorably with all but the very best modern center-fire rifles and ammunition. (If you don't think so, try it with your pet.) Of course, velocity isn't as high—it runs about 1800 f.p.s. in most muzzle loaders—but it is adequate for its purpose. This mild velocity has one advantage, too. Barrels last longer than those in many high-velocity center-fires. Coble has put more than 5000 balls through a number of his barrels and they're still grouping as good as new.

Coble doesn't do much hunting, although the last year or so he's been going so he can start Jim off right. But he does shoot other rifles than muzzle-loaders. Indoors he shoots with the Rock Spring Rifle Club in State College, and outdoors he shoots thirty caliber with the Altoona Rifle Club. But his greatest interest has always been the muzzle-loaders and some of this has transferred to Mrs. Coble and Jim. The results have been gratifying.

For example, at the Shartlesville match in 1956, Jim had his first chance to fire a match at 100 yards.

This was five shots from bench-rest and Jim's score was a hot 49x50, which led the field when he fired it. Coble followed this with a 48-2X, but Jim was still in first place with a good chance of taking the match. Then Mrs. Coble's turn came and she drilled in a 49-2X to squeeze past Jim and take first place—and Jim and his Dad had to settle for second and third. This was something of a disappointment for Jim, but he certainly had nothing to be ashamed of. At the time he was not yet ten years old!

More recently, in late 1957, at the 13th Annual Fort Ticonderoga (N.Y.) Muzzle Loading Match, Coble posted a 234 score to nose out 244 other competitors and take the Fort Ticonderoga Cup and also the Major Ned Roberts Memorial Trophy. At the same match, Jim took the Children's Match and the family came within a fraction of an inch of sweeping everything for Mrs. Coble had the Women's Match won until the last competitor equalled her score and took the match by string measurement. They're not sorry it ended that way, though. It gives them something to shoot for another time.



THE GAME LAW and YOU

squirrels and blackbirds, a report of the killing must be made within twelve hours to the nearest game protector or to the Game Commission at Harrisburg. The report must give the date and time of killing, species killed, and sex in the case of elk, deer and bear. Except in the case of red squirrels or blackbirds, the entrails must be removed immediately and the carcass put in a safe place.

These carcasses are to be turned over to a game protector, except that one elk or deer or bear so killed may be kept for consumption only by the household of the family residing upon the land where it was killed. "No additional animals shall be retained for food until the entire carcass of the animal previously retained has been entirely consumed under the foregoing provisions." Any additional big game animals must be turned over to the game protector.

It is unlawful for anyone to kill game for property damage except under these requirements and stipulations of the Legislature as set forth in the Game Law.

**PROTECTED BIRDS** and their plumage may not be sold. The American egret is a classic example of a bird which was almost exterminated at the turn of the century by market hunters seeking beautiful plumes for women's hats.



The Game Law prohibits not only interference with game animals, but also the molesting of the eggs, nests or young of game birds or protected birds. Protected birds may not be shot at, taken, wounded or killed, nor may anyone have such birds or any part of them in possession.

However, and this is very important to farmers, this provision does not apply to "any eagle or hawk or owl or turkey vulture or heron protected by this act, when caught in the act of destroying domestic livestock, poultry, game, other protected birds, their nests or young, or fish in private rearing ponds, or to prevent such killing immediately following such destruction." It should be noted, however, that any bird so killed may not be mounted or kept in possession without a permit from the Game Commission.

Sale of protected birds or their plumage is unlawful. This applies not only to Pennsylvania birds but also to those from elsewhere if they are the same species as those found wild in Pennsylvania.

One of the most interesting of all the provisions in the Game Law is that covering ownership of the carcasses of game. It is Section 728, which provides that if the game is lawfully shot and killed ownership "shall be in the person who inflicted a mortal wound which causes the death of the bird or animal and which enables the hunter to gain possession of the carcass." So far, so good, but it doesn't stop there. It states further that if the game keeps going and someone else inflicts a "mortal wound" the ownership shall be in "the hunter whose fatal wound stopped the flight of such game and enabled him to take possession of the carcass." At this point in the argument the Legislature adroitly takes the Game Commission out of the picture. It provides that in event of dispute a disinterested person, "other than an officer whose duty it is to en-



force the game laws" may be called in to arbitrate, and "no such officer shall testify concerning any such dispute."

Once the hunter actually established his ownership of the game, however, it is his. The Game Law specifically provides in Section 729 that it is personal property and the subject of larceny.

One point of law which everyone should be familiar with, whether he is a hunter or not, is that the Game Law gives any officer charged with game law enforcement the right, if he is in uniform, to stop automobiles on the highway. He is required to display his badge or other identification. He may inspect or search the vehicle or conveyance, together with its passengers and contents, for unlawful possession, concealment or transportation of game. It is unlawful for anyone to interfere with an officer while making such inspections, or to turn off his lights to avoid identification or arrest after the request or signal to stop.

A long series of penalties, for violations is set out in Section 731. Without going into the fine points, some highlights may be noted. For Sunday hunting of game the fine is twenty-five dollars; for night hunting, fifteen dollars. Illegal use of a vehicle, trailer, conveyance, boat or craft, fifty dollars for each day. For illegal taking of birds or animals, ten dollars for each trap or device used. For violating hunting party roster requirements, twenty-five dollars. Tagging violations are twenty-five dollars; failure to report big game kills carries a two dollar charge. Transporting game not properly marked, twenty-five dollars, and this applies to the carrier as well as to the hunter. For illegally importing or releasing birds, eggs or animals, twenty-five dollars each. Interfering with nests and young of game birds—fifty dollars per nest, twenty-five dollars for each young.

For interference with protected birds the tariff is ten dollars. Sale of protected birds or imported counter-parts calls for a ten dollar fine.

The practice of "jacking" calls for one of the most severe penalties, one hundred dollars "for each person concerned" plus forfeiture of the "vehicle, trailer, headlight, spotlight, or other contrivance and all paraphernalia used." The specific offense is "making use of, or taking advantage of, any vehicle, trailer, conveyance, headlight, or spotlight, or artificial light or battery or other contrivance or device to spot or locate or hunt for, or catch or take or kill or wound, any elk, deer or bear." Similar penalties apply to the use of set guns, not only for big game but also for "any other wild bird or wild animal."

Failure to stop on the highway is a twenty-five dollar offense, but turning off lights to avoid detection is worth fifty dollars.

For violations dealing with elk, the penalty is two hundred dollars and, in the court's discretion, six months in jail. For deer, one hundred dollars during the season; out of season, the fine is the same but there is added a three year mandatory license revocation. For bear, two hundred dollars during the season; out of season, two hundred dollars and five years' mandatory revocation. For each wild turkey, ruffed grouse, pheasant, quail, partridge or woodcock, and also each raccoon, twenty-five dollars. For each other wild bird or wild animal, ten dollars.

If any of the above birds or animals are legally taken but held beyond the legal possession period, the fine is one-half of those indicated. Illegal possession of a ferret or fitch also rates a twenty-five dollar fine and costs for each animal. Failure to pay fines rates one day in jail for each dollar of fine. For second or subsequent offenses the court in its discretion may add one day in jail for each dollar of fine.



# Birdsfoot Trefoil at The White Deer Rod and Gun Club

By James H. Eakin

The Pennsylvania State University

**T**HE White Deer Rod and Gun Club is more than just a hunting camp founded almost forty years ago; it's a second home for a group of experienced hunters and fishermen. Our camp is located in the beautiful ridge and valley section of Huntingdon county near a little village called Neff's Mills. When I joined this outfit about ten years ago I sure was impressed by the good shooting and by those members who could drop a dry fly where they aimed, but as an agronomist, I was most impressed by the game feed program. We were most fortunate since the camp is located near Penn State University and about one-fourth of the membership were either professors of agriculture or county agricultural agents. These people had in past years planted about everything from Tartary buckwheat to

field corn and ladino clover. Some game feed, regardless of kind or quality is certainly better than nothing, but most of the men would admit that in the past the program left much to be desired.

## Birdsfoot Trefoil

In the spring of 1951 we broadcast some Empire and European birdsfoot trefoil on corn stalk land. We had a fair "catch" that year and it looked a little better in 1952. By 1953 it was quite thick and in 1958 it still looked very good. I have little doubt that it will still be furnishing game feed in 1970 if we give it a little lime and fertilizer. Since 1953 we have gradually added to our trefoil game feed bank, and now we plan to rest on our oars and just buy a little lime occasionally, and each year a light application of fertilizer.



This will certainly be a lot cheaper for us than a lot of plowing each year.

### Characteristics of Trefoil

Birdsfoot trefoil is a legume, more or less like alfalfa. However, it will start and grow in areas where alfalfa would fail. It has fine stems and leaves, and a three year old plant may have 400 or more stems arising from a single crown. In other words, two plants per square foot of land area will furnish a lot of game feed.

Another good characteristic is that it never drops its leaves as it matures, but remains lush and green the entire summer. You never need to clip it to keep it young and tender for good grazing. Also, there is nothing more beautiful than a trefoil field when it is in bloom, and it blooms all the time. It has a bright yellow sweet-pea like flower that is very attractive. It is very gratifying to all of us at "White Deer" to see old poverty grass fields become beautiful legume fields of which any farmer would be proud.

### Game Like It

I have heard rumors from time to time that deer do not like trefoil. This just isn't true. Deer graze our trefoil fields almost constantly. Also, our rabbit population has at least tripled since we started this program. It also makes good bird cover and is capable of producing over 100 lbs. of seed per acre for additional bird feed and to help reseed itself.

### How to Grow Trefoil

Most hunting camps are not blessed with lots of farm machinery and will find it necessary to contact a local farmer for help. We are not looking for the kind of trefoil production that will keep a herd of dairy cows going, but we would like to have a respectable seeding. Because of this our seeding methods won't produce 100% results at once, but as long as

we can establish a couple of trefoil plants on each square foot we are on our way to a full stand in a couple of years.

#### Step #1

If at all possible, take a soil sample to your county farm agent and let him test it for lime needs. He will do this free of charge. Apply the lime as far ahead of plowing as is possible.

#### Step #2

Plow the land and work it down with a disk. Plant about 15 lbs. per acre of grain sorghum. Drill the grain sorghum from a regular grain drill, but be sure to stop up every third boot of the drill so as not to plant too thick. A corn planter could be used, but it will require special sorghum seed plates in the planter. In this case use only 3 to 5 lbs. of seed per acre. Be sure to use 400 to 500 lbs. per acre of a 5-10-10 fertilizer regardless of how you plant. Chances are your land will be very poor and you need not worry too much about weed competition. Don't be too disgusted with your sorghum crop on this kind of land. You should produce some sorghum seed heads in spite of the fact the plants will be growing against their better judgment. During the summer of sorghum growth and the following winter the lime will have had a chance to take hold and start doing the job of correcting soil acidity.

#### Step #3

In April purchase some European birdsfoot trefoil seed, or purchase a mixture of European and Empire trefoil. Use 10 lbs. per acre of birdsfoot trefoil. Be sure to inoculate the seed using about three times as much inoculant material as generally is shipped with the seed. Just slightly dampen the seed with some sugar syrup and then stir in the inoculant. If the seed is still sticky dump on a little kitchen cornstarch to dry it up.

You are now ready to broadcast this trefoil seed in the standing sorghum stubble. This can be done with a cyclone seeder or if one isn't available do it by hand. It is very surprising that with any break in spring weather you will obtain a fairly good stand. This is due mainly to the fact that old abandoned land will not produce much weed competition.

For an agronomist this sounds like a rough way to treat trefoil, but we have a lot of fields planted over several years to attest to its success.

### **Trees and Shrubs**

In addition to many thousand pine trees, we have planted additional thousands of shrubs and trees that will produce good game food and cover. In the last few years we have concentrated on planting Bi-color lespedeza, Bayberry and Russian Olive. To plant these shrubs we simply plow out a single furrow and it takes but a little time to "heel" in these seedlings. We have had good

success with Chinese chestnuts in spite of the usual mortality suffered by deer browsing on the young trees. A lot of our trees are now producing a good crop of nuts each year. In addition to chestnuts we have used the Mulberry tree. In the past few years we have been grafting black walnut seedlings to Persian walnuts and also to named varieties of black walnuts.

If you desire any additional information on nut growing you can contract the Pennsylvania Nut Growers Association, 748 S. Queen Street, York, Pennsylvania.

All of this business of planting trefoil, shrubs and trees sounds like a lot of expense and work; actually, it isn't. It does require a little organization around the clubhouse, but it is surprising how much of this kind of work can be accomplished with careful planning, and just a few hours of work each year. These few hours can mean a great deal to our wildlife, and it is good insurance for a lot of fun and relaxation in the future.

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### **Dog Training Season Ends March 31**

"It is unlawful for the owner of any dog or a dog under his control to permit such dog to chase, pursue or follow upon the track of any wild bird or wild animal, either day or night, between the first day of April and the thirty-first day of July next following." So states the Pennsylvania Game Law.

An exception occurs when a valid petition, signed by enough licensed hunters and farmers living in a county, is approved by the Game Commission. Then it becomes lawful to hunt foxes with dogs in such approved counties throughout the year, except for the sixty-day period, April 1 to May 30, so long as the hunters comply otherwise with Game Law requirements.

However, field trials may be held between April 1 and April 30 follow-

ing the securing of a field trial permit from the Game Commission Division office serving the area within which the trial is to be held. In such a meet, where dogs are permitted to work on liberated or native wild game, the directors and participants must use care to prevent the injury or killing of the game being pursued.

It is also lawful to hold field meets or trials for dogs with led game animals or drags at any time between the 1st day of April and the 31st day of July next following, after having secured the necessary permit.

In spring and early summer it is specially important that dog owners keep their dogs penned, tied or under close control at all hours of the day and night. During this period free-running dogs destroy the nests of birds and small game animals. Fawns and mature deer also are victims of marauding canines.





PGC Photos by Batcheler

# The 1958 Regulated Deer Hunt At Rockview

From Information Compiled By  
Division of Wildlife Research, Pennsylvania Game Commission

**F**OR more than a decade the deer herd abounding on the grounds of the State Penitentiary at Rockview has attracted much attention. Many a child saw his first deer as Dad eased the family car along Route 64 through the grounds. Other motorists were not as lucky, and experienced smashed grilles and fenders and more seriously damaged autos. Officials at the Institution watched as crop and other damage increased.

Finally in 1958 it appeared that action to reduce the herd was imperative. Institution officials agreed to a harvest by the public under strictly regulated conditions. A controlled hunt for deer was new not only to the hunters but also to the

regulating agencies. There was much contrasting speculation as to the interest in such a hunt. One theory was that the Game Commission would be swamped with requests for permits, while fewer maintained the other end, that it might be difficult to interest enough hunters. The accomplishment of this hunt apparently proved both wrong, although it is too early to determine or predict the effect of this harvest on the Penitentiary deer herd. The experience provided by this hunt may accrue more value as the need for similar action increases in other comparable situations.

Original plans for this hunt called for a minimum of 500 hunters on

the area at any one time. The grounds were delineated into 4 separate hunting areas and each of the 500 hunters would be assigned a specific area to hunt. There was a flurry of early applicants but only 311 hunters had applied prior to the deadline. Since not all of these applicants desired to hunt on the opening day, announcement was made that hunting room was available and could be had on a first come, first served basis.

The hunt proper got off to a slow start as less than one hundred hunters had checked in by the 7 A.M. opening hour. During the remainder of the first day additional hunters checked in to bring the total to 200. The success ratio was phenomenal—81%—162 deer killed by 200 hunters. Although the word of this success spread rapidly, only 217 hunters registered for the second day and 260 for the third and final day.

Day	Hunters	Deer	% Success
1	200	162	81
2	217	98	45+
3	260	84	32+
Total	677	344	50.8

Smooth operation of the hunt was guaranteed by the detailed planning and efficient work by the Rockview staff. As the hunters checked out, the deer were weighed and examined by Game Commission personnel and Graduate Students from the Pennsylvania State University. One of these students engaged in a behavior study of deer used a part of the Rockview grounds as a study area during the past year. In the course of this study, he had captured, tagged and marked 67 deer, 52 of these were females and fawns. Valuable information and data was obtained as a result of this hunt.

Of the 52 antlerless deer previously marked, 20 were killed on the study area and 6 nearby. If this ratio—50%—is extended to the unmarked population, a pre-season population of 700 antlerless deer would be indicated. This was only slightly more than the estimate (total population 700) provided by the Game Protector in the District embracing Rockview. Also indicated by this population was a density of one (1) deer per ten acres! Little wonder the crops, fruit trees, etc., suffered!

EVERY DEER taken during the three-day hunt was carefully weighed and examined by Game Commission personnel and graduate students from Pennsylvania State University. The average weights of the Rockview deer were not too different from those taken in other areas.





An interesting picture was presented by the age of the deer.

<i>Age</i>	<i>Female</i>	<i>Male</i>
Fawn	79	70
1½	58	17
2½	47	..
3½	37	..
4½	11	..
5½	8	..
6½	2	..
7½	10	..
8½	0	..
9½	2	..
10½+	3	..

Of the 17 male deer in the 1½ year class, 8 had failed to grow visible antlers, and the remainder had either shed whatever antler growth had been present or had broken antlers. The high ratio of older bucks without visible antlers confirmed the crowded range and apparent poor nutrition despite the damage caused to crops. The cause of the abrupt reduction in the number of female deer between the 3½-4½ year age bracket was not immediately apparent. Perhaps conditions for fawn survival were bad in that particular year or there was other effective reduction of the deer born in 1954.

The average weights of the Rockview deer were not too different from other areas.

<i>Age</i>	<i>Weight</i>	
	<i>Female</i>	<i>Male</i>
Fawn	52 lbs.	54 lbs.
1½	87 lbs.	83 lbs.
2½	99 lbs.	
3½	103 lbs.	
4½	104 lbs.	
5½	102 lbs.	
6½	116 lbs.	
7½	101 lbs.	
9½	91 lbs.	
10½+	98 lbs.	

Safety was stressed for this new experience in Pennsylvania hunting and it paid off. There were no hunting accidents. In the excitement of the hunt one unlucky nimrod slammed



AGE OF DEER was of interest not only to research workers but also to successful hunters. Of the 17 male deer in the 1½ year class, 8 had failed to grow visible antlers and the remainder had either shed whatever antler growth had been present or had broken antlers.

his finger in a car door. At one time it appeared that one of the older hunters was lost. But when he finally appeared he quickly explained that he was enjoying the hunting so much that he failed to put in his appearance at the prearranged time and spot.

The Game Commission is happy that the Bureau of Correction permitted the public to harvest these deer. Valuable experience and information has been gained and while final appraisal is not yet possible, it is not too early to acclaim the hunt a worthwhile undertaking.



# CONSERVATION NEWS



## PRELIMINARY ESTIMATE OF 1958 BIG GAME HARVEST SHOWS PENNSYLVANIA HUNTERS EQUALLED '57 RECORD

Replying to inquiries about the harvest of game in Pennsylvania during the 1958 seasons the Game Commission advises: Not until all the reports have been compiled will there be an official announcement on the numbers of game birds and animals bagged in season last year.

However, judging from big game kill cards already received this much can be told: In their separate "any deer" season last October archers in the Commonwealth took about as many of the animals as fell to arrows in their 1957 season, when the final score was 1,358.

The number of bear kill reports on file indicates the 1958 season bag has reached the predicted "over 350,"

a marked improvement over the 294 taken in 1957.

Judging from the avalanche of cards reporting deer legally cropped during the firearms seasons for antlered and antlerless deer last year the total for both sexes will compare favorably with that for the "buck" and "doe" seasons of 1957. A total of 103,758 male and female white tails were harvested during the same type seasons that year.

The official totals for the various kinds of game birds and animals taken in Pennsylvania during the 1958 seasons will not be known for another month or so. Considerable time is required for this exacting, tedious process.

**HOW OLD IS A DEER?** Steve Liscinsky, left, Game Commission research biologist, along with other Commission personnel worked throughout the 1958 season collecting data on the age composition of the deer harvest. Here he shows Joseph E. Barclay and Clarence Hollabaugh, of Meadville, a display of deer jaws showing ages ranging from two months to 10½ years.





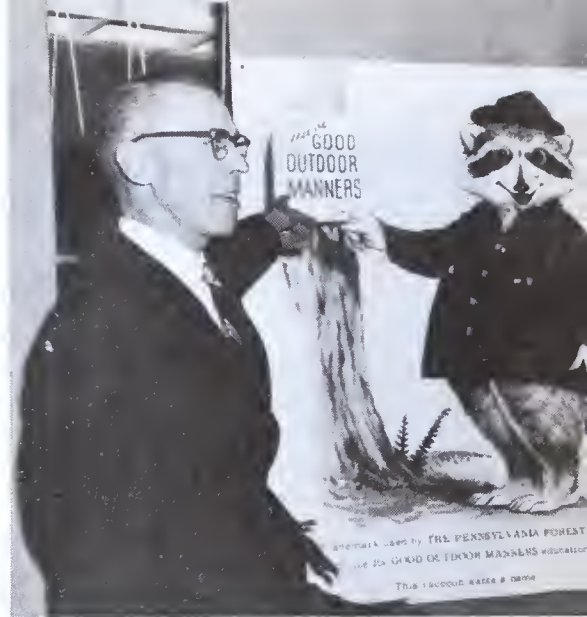
## December Rabbit Season Tested Men and Dogs

Pennsylvania's extended 1958 cottontail rabbit season—December 27-January 3—and the concurrent one for the snowshoe rabbit (varying hare) brought some of the anticipated results. The hunts also provided some surprises for persons who engaged in the wintertime sport.

As the Game Commission hoped, cottontail hunting relieved the pressure on the snowshoe rabbit population. In some instances, however, persons who wished to hunt the "mountain rabbit" were forced to go for the white animal's country cousin because of deep snow and treacherous road conditions in northern counties. An early estimate of the snowshoe kill was lower than the average of recent years.

On some days of the extended cottontail season beagles turned out to be fall weather hunters. They did not trail bunnies well, if at all, on frozen or snow-covered ground. There were numerous reports of fair to good bags of the "farm rabbit," but some hunters said that either the rabbits were not out or they appeared not to be present everywhere in normal habitat. Often the complaint was, "They popped in holes as quickly as they did in the unseasonably warm November weather." Some experienced outdoorsmen who trailed or "kicked out" rabbits without using dogs found that method produced more shooting and better success because the cottontails ran longer, did not go underground as readily as when "pushed" by hounds.

Many hunters appreciated the opportunity to pursue the popular bunny with the scattergun during the Holiday Season. But many who planned such excursions evidently became too busy with other activities to take part in the unusual opportunity to hunt.



**GOOD OUTDOOR MANNERS RACCOON** is examined by Lloyd Partain, president of the Pennsylvania Forestry Association. The raccoon is the symbol of the educational project undertaken this year by the Association. Over 3,000 letters announcing a contest to name the raccoon have been mailed to schools throughout the Commonwealth. Over 450,000 book marker-entry blanks will be printed for the school children to use.

## 14th Conservation Education Laboratory for Teachers Set at Pennsylvania State Univ.

The 14th Annual Conservation Education Laboratory for Teachers, to be conducted at Pennsylvania State University during the coming summer.

The Laboratory work may be taken for graduate or undergraduate credit and to meet teacher certification requirements. Students are housed on the Penn State Campus and a bus is provided for field trips. Teachers may attend either of two sessions: June 29 to July 18 or July 20 to August 8.

A limited number of scholarships are available and are awarded on the basis of a letter of recommendation from a school official.

Additional information, bulletins and applications may be obtained by writing to The Conservation Education Laboratory for Teachers, The Pennsylvania State University, 311 Burrowes Building, University Park, Pa.



John J. Slautterback



E. W. Turley



William C. Achey

## IN MEMORIAM

Three retired employees of the Pennsylvania Game Commission have died in recent months. Each held long records of loyal and faithful service to the sportsmen and citizens of this Commonwealth.

William Achey passed away in Hazleton on February 8. He served as a Game Protector from June 1, 1924 to November 11, 1949 when he retired from active service.

John J. Slautterback died on January 30. He was a Game Protector in Mifflin County for several years, then was made an Acting Field Superintendent and later a Traveling Game Protector or Supervisor. He was promoted to Chief of the Bounty Division on May 1, 1924, later advancing to Executive Director in which capacity he served from January 1, 1929 to June 30, 1931. He resigned July 1, 1931 to accept other employment but returned to the Game Commission on May 16, 1939 as a Game Land Technician. He was retired on July 21, 1949 after a total Game Commission service of about 25 years.

E. W. Turley died on December 6. He became a Game Protector January 20, 1919 and was made a Game Refuge Keeper on August 16, 1934. His classification was changed on January 1, 1939 to Game Protector, Land Management, in which position he served until the time of his retirement on November 30, 1941 with more than 22 years of service. He was located at Weedville in Elk County and was the father of Roland Turley, a Land Manager in the Commission's Southcentral Division.



## Outdoor Education Demonstration Again Part of Harrisburg Show

A new approach to natural resource education will be found, for the second consecutive year, at the 1959 Recreation and Sportsmen's Show, March 16-21, at the Farm Show Building, Harrisburg. School teachers and other spectators as well as students participating in the simulated outdoor activities, will profit from the unique learning experience. The show is the only one of its kind in the country where the new conservation teaching technique is publicly demonstrated.

A typical forest camping scene covering more than 12,000 square feet will be brought indoors. Sixth grade boys and girls from Lancaster, Lewistown and South Williamsport will take part in the project. This experience, which adds meaning to text book education, provides an atmosphere which greatly stimulates the learning processes.

A program of activities, events and experiences, all of which are an integral part of the school curriculum, will be conducted in the "indoor forest" throughout each of the six days of the show. Among the activities carried on by conservation agency personnel will be tree planting, stream management, forest and wildlife management, predator calling and trapping, weather station activities, construction of wildlife feeding shelters. In addition the boys and girls will learn how to safely handle and shoot a rifle, cast fishing lures, and prepare a fire for outdoor cooking. The pupils will be under the supervision of their regular classroom teachers and student counselors from State Teachers Colleges.

Cooperating in the unique Outdoor Education project are the Game Commission, Fish Commission, Dept. of Forests and Waters, Dept. of Public Instruction, Dept. of Agriculture and Pennsylvania State University.



### York, Pennsylvania Boy Is National Easter Seal Child

Philip Little of York, an ardent fisherman, will represent the thousands of crippled children in America as the National Easter Seal Child during the annual Easter Seal appeal, February 27 to March 29.

The Easter Seal appeal is conducted across the country and in Pennsylvania by local crippled children societies which use the public's contributions to support direct care and treatment to crippled children and adults.

A \$1 million goal has been set for Pennsylvania this year. During 1958 more than 11,000 crippled were treated by 51 local crippled children societies and the program needs to be expanded to provide service for many, many more.

Philip, who was the Pennsylvania Child in 1957, asks all sportsmen and everyone to be generous this year in making a contribution to Easter Seals.



# The Balance Sheet

By Tom Forbes

**I**N the world of finance the balance sheet measures in dollars and cents the success or failure of any business enterprise. A profit accrues to management when the cost of doing business can be kept below the proceeds received from sales. What criteria should we use to evaluate the any-deer season for archers in Pennsylvania? Should we measure the dollar cost of our equipment, transportation costs, lodging, etc. against the weight of venison at so much per pound? If we do the ledger will be heavily weighted on the deficit side.

Certainly a dollars and cents approach cannot be used to determine the success or failure of the any deer season. Can you assign a monetary value to the beauty of Penn's Woods

in October; the solitude of the deep woods; or the breath taking view from a high point of forested ridges sweeping away to the distant horizon? Crisp, frosty mornings, the warmth of the midday sun, lights and shadows flickering across the forest floor as a gentle breeze stirs the leaves on the red oaks and maples; dark shadows moving up the mountain slopes as the sun slowly sinks behind the western ridge and the chill of evening turns out thoughts toward camp where a glowing log in the fireplace sends a thin wavy line of wood smoke skyward to serve as a beacon guiding us to warmth, companions, and a hearty meal. Man needs the healing touch of nature to dispel the tensions built up in the routine of our daily lives. Peace of mind and a sense of the nearness of the Creator of all things are among the intangibles on which no monetary value can be set.

More than 72,900 bowhunters were licensed to hunt in Pennsylvania during the archers any-deer season of 18





days last October. The game fund benefited by the additional license fee required of these hunters in the amount of \$145,836. There are 15,250,000 acres of forested land in Pennsylvania and deer are widely dispersed throughout the Commonwealth. If bowhunting was evenly distributed over the area, the concentration would amount to one hunter for approximately each two hundred acres. Actually bowhunters encounter few fellow hunters except members of their own party when engaged in a hunt. There are no concentrations of hunters such as are common in the gun season. Drives are unusual. Still hunting is the preferred method and only on rare occasions will a deer, disturbed by a fellow bowman come within bow shot.

Archers, to date, have reported a total of 1,327 deer taken with bow and arrow during the past archery deer season. The official count for the 1957 season was 1,358. The 1958 season saw an increase of 17,364 licensed bowhunters. In 1957 one out of every forty-one bowhunters reported taking a deer. This past season the ratio was 1:55. On averages, the success ratio in the '57 season of 8 days was better than that of the '58 season which lasted for 18 days. On the basis of the past two any-deer season it appears that no estimate of the kill in the future can be based on the numbers of hunters or the length of the season. Other criteria which are difficult to evaluate are apparently the governing factors. In 1953 and 1954 a 12 day bucks-only season for archers showed a similar pattern. Although the number of bowhunters in 1954 increased 38% over the 1953 figure, the kill in 1954 was 35% less. Such factors as weather, the condition of the foliage, availability and abundance of food supplies, are ever changing phenomena in nature and may weigh the scales for or against the archer when he takes the field in search of the white-tail.

The bowman can take a measure of satisfaction from reviewing the record of his conduct during the archery deer season. Although an additional 17,364 bowmen were licensed to hunt during the archers any-deer season above the previous high in 1957, there was a 35% reduction in the number of violations of the game laws. Fifty bowmen paid the penalty for trying to beat the game. The largest number of violators, twenty, were fined for hunting between 5:30 p.m. and 6:00 a.m. Spot-lighting deer when carrying weapons in the car accounted for another 14 violations. This is always a temptation when returning to camp after a days hunt. Resist that urge until you have had supper, then remove the archery tackle from the car, drive over the roads and spot light legally. Remember that the game protector knows where deer gather in the meadows to feed as well or better than you do. You may be walking or rather riding right into trouble and there is a stiff fine for this offense. The cross-bow is not a legal weapon in Pennsylvania and one bowman learned the hard way when he carried one into the hunting field. The law prohibits hunting within 150 yards of buildings. It may appear unreasonable to a bowman but it is intended to protect persons and property in the vicinity. Maybe you couldn't hit a barn at 150 yards with your bow but the law makes no exceptions as to weapons and five bowmen paid the penalty for disregarding this provision of the law. Four were apprehended and paid fines for hunting from vehicles and three for hunting in the archery season without an archery license. One bowman was arrested for hunting deer on Sunday, one for failure to display the license and one for improper tagging of a deer, an omission which spoiled an otherwise successful hunt. Good sportsmanship builds good public relations, and good public relations are necessary to preserve the sport.

In the history of bow hunting in Pennsylvania there has never been a fatal accident and there is no record of any bowman shooting another person by accident. This splendid record can only be maintained in the hunting field by extreme vigilance on the part of the bowhunter. If a companion on your flank is ahead of you, a shot in cover to your own front can be deflected and endanger your companion. If in doubt, withhold your shot. The bow is a short range weapon. This is a built-in safety provision which makes positive identification of game relatively easy.

The law requires that report of an accidental shooting in the hunting field be reported to the Game Commission within 72 hours. A total of

26 accidents were reported during the past season; 24 were self-inflicted and two were inflicted by hunting companions. The principal cause of self-inflicted accidents came from the common practice of carrying an arrow nocked in a ready position on the bow. These accidents fell into two general categories; either the bowman fell on the arrow or in crouching to move underbrush, the broadhead was driven into the calf of the leg. In one case the bowman was using a bow quiver which did not have a pocket to insert the hunting heads. The bowman tripped on a concealed barbed wire, fell on his bow and an arrow penetrated his shoulder. Leaving his tree perch a bowman dropped



TRAILING a wounded deer is a painstaking job, as many a bowhunter found out during the 1958 season last October. A single drop of blood about every eight paces may be the only sign. A good bowhunter may have to get down on his hands and knees to follow the trail.



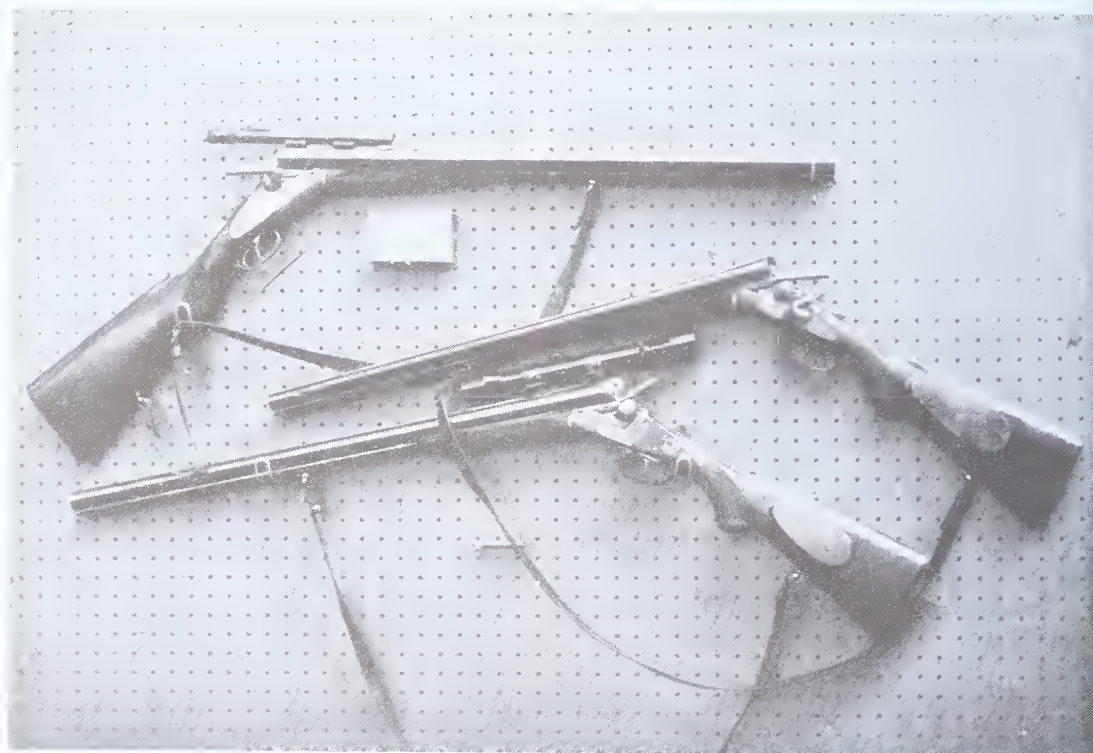
one of his arrows and the hunting head penetrated his heel. Missing an arrow from his quiver, a bowman turned back to search and walked into the arrow which was standing upright in the weeds. Seven stitches were required to close the wound in his thigh. In both cases where injury was inflicted upon another, a nocked arrow was the cause. In crossing a fence one bowman swung his foot into his companions hunting head and received a lacerated toe. In the light of these examples, certain precautions can be taken which will reduce the chances of self inflicted injuries. The practice of carrying an arrow nocked in position on the bow is dangerous and should be discontinued. Every quiver—belt, shoulder, or bow—should have a substantial pocket which will completely cover the hunting heads. Arrows carried loosely in the hand are dangerous. They cannot be controlled when you stumble and fall.

Two States, Michigan and New York exceed Pennsylvania in the number of licensed hunters. However Pennsylvania ranks first in the number of licensed bowhunters. Michigan estimated that approximately 41,000 bowhunters enjoyed the 36-day season which ended November 5. West Virginia's archery deer season extended from October 17 to January 3, 1959, a total of 79 days. Many Pennsylvania bowhunters took advantage of this any-deer season since a non-resident license costs only \$5.00. An additional fee of \$1.00 is charged to hunt in the West Virginia National Forests. In New Jersey the bowhunting season extended from October 11th to November 7, a four week period. During this any-deer season the bowhunters bagged 1251 deer.

Fifty-seven deer were bagged in Schuylkill County by bowhunters during the any-deer season. Sullivan County reported 49; Potter 45; Lycoming 44; Forest 40; and Carbon

County 33. Bowhunters in Lawrence County failed to report a single deer. Allegheny, Armstrong, Juniata, Montour, and Washington Counties reported one each. York had six and Lancaster reported three. The balance of the kill was about evenly divided among the remaining counties. Apparently the northern counties have the same attraction for bowhunters as they have for gun hunters later in the year. Deer in the predominately agricultural counties are better nourished, larger, and carry better racks than those of the forested areas. Bowmen seeking trophy deer should bear this in mind when planning this year's hunt.

Trailing a wounded deer is a painstaking job. The bowhunter sees his projectile in flight and generally has a pretty clear impression of the location of the hit. A spinal shot will usually drop a deer in its tracks but the bowhunter generally tries for a chest shot. These shots produce internal hemorrhage but the deer may travel a considerable distance. If pursuit is delayed, the deer will probably lie down within a couple of hundred yards. Once down, it is up to the bowhunter to track his kill. There may or may not be very little sign of external bleeding. A single drop of blood about every eight paces may be the only sign. A light breeze which turns over the leaves on the forest floor can make this sign extremely difficult to follow. Nevertheless a bowhunter will make a painstaking search on his hands and knees if necessary to recover his quarry. A bowman has few opportunities to register a hit and when he does register he does not give up easily. There are thousands of bowmen in Pennsylvania but the term BOWHUNTER is properly reserved to those who have acquired the ability to do three things: Set up a shot; register a hit; and recover the quarry. These individuals are bowhunters.



# The Combination Gun

By Jim Varner

**I**F you respond to the changes unfolding during the month of March I am sure there are a lot of thrills in store for you. This month might be called the beginning of one of the four major segments in our annual cycle of seasons. King winter is beginning to lose his grip on the area and a new mood—a new trend will soon assert its presence with the unfolding of new life, perhaps new hopes, a period we call Springtime.

To the fisherman, especially the trout fisherman this is a period of great hopes as he visions active streams and full lakes and beaver dams. To the shooter it can mean

pleasant hours afield seeking migratory feathered predators as well as the hibernating predators who are now awake and actively seeking eggs and young of our struggling small game. Predator hunting can be enhanced by the use of the combination gun. A few of you sportsmen own these firearms, others would like to know more about them.

Were you ever on a hike with your vermin rifle when all of a sudden out of the hemlocks ahead a great horned owl took off with a flock of excited crows following him to the far side of the woodland dogging his every wingbeat, as you watch helplessly rifle in hand? You think, if I only had my shotgun. That big owl would have been easy for the shotgun and with the crow-call you could have easily called those agitated crows back for several kills. You try to get in range of the 'flying circus' with the rifle but





they are alert—by now and your chance of a fair shot is usually lost. In other words you need both a good rifle and a good shotgun to get the most out of your trail and woods loafing. Carrying two firearms suitable for such a job would be a task. Friends you would meet would probably doubt your mental equilibrium. A combination gun is what is needed.

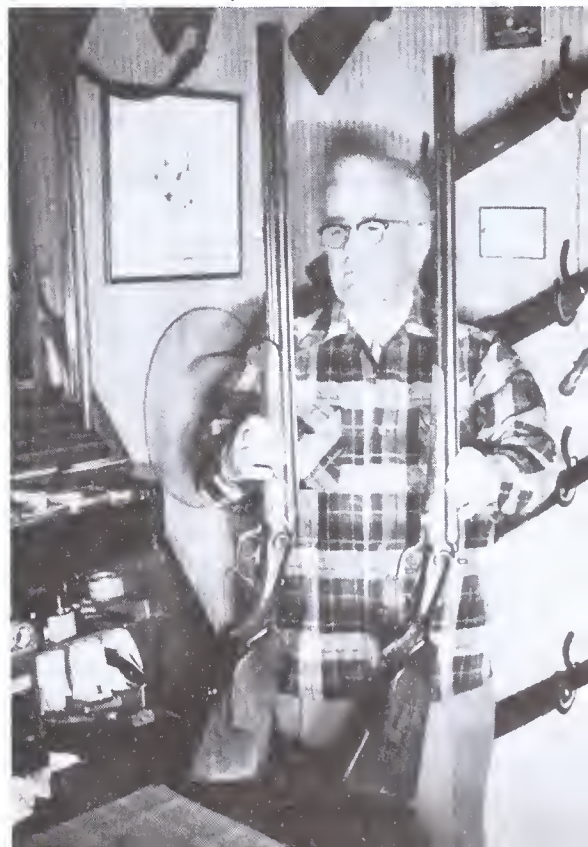
The combination sporting firearm has never met with an enthusiastic reception in the United States for some unaccountable reason. For one reason they were not made in practical calibers and gauges combined. Little thought was given to precision paralleling of barrels and accuracy. A few were made back in the muzzle-loading days, but they were clumsy, slow and inefficient, due to long heavy rifle barrels and small shotgun gauges. The British Paradox was an attempt to make a smooth bored barrel, rifled a few inches from the end, serve the purpose of a rifle and shotgun. This rifling at the muzzle did produce fair accuracy with special slugs and balls up to 100 yards but the shot pattern suffered, not being capable of even good cylinder bore patterns. The French made a similar makeshift called the Europa. Both of these firearms were made to give the British or French colonist or pioneer in Africa, or other spot in the world, a combination he could use with fine shot for small game, buck-shot for deer or similar non-dangerous game and slug or ball for dangerous animals. Some of them were made in formidable sizes, such as 8-bore, 10-bore and even 6 and 4 gauge. Seven to twelve drams of black powder back of a ball or slug weighing 3 ounces or more was capable of discouraging even the most determined African 'putty-cat' or rhino.

Those days have passed however. Where the great Paradox was the extreme in size then, the pendulum has now swung to the other extreme with the 22 long rifle cartridge over a 410 shot barrel, as made by Stevens,

being about our only combination gun for the moment, in the U.S.A. It is a fine little pot-hunting arm for the smallest of game and some plinking. I believe some of the 22-410 combinations were used as survival arms during the last war. Prior to World War Two Marlin made some practical little over and unders with 20, 16, and 12 gauge shot barrels under either 22 rim-fire, 22-Hornet, or 218-Bee rifle barrels. These were efficient predator, woodchuck and small game outfits. I would like to see Marlin revive this over and under in 219 Zipper or at least 30/30 Winchester rifle caliber.

Up to now we have been talking about doubles or a two shot combination firearm either over and under or side by side. A serious looking chap down in front asks about

WESLEY FRANKLIN, well known undertaker of Moscow, Pa., shows two combination guns from his fine collection. He owns 40 or more of these high-priced firearms. On the right is a J. P. Sauer over-and-under; left is a Simpson and Sohn "drilling" from Suhl, Germany.



the three and four barrel jobs we saw in Germany. Yes, our soldiers brought back thousands of them after the mop-up. Many considered them freaks in calibers no one understood, but were they that bad?

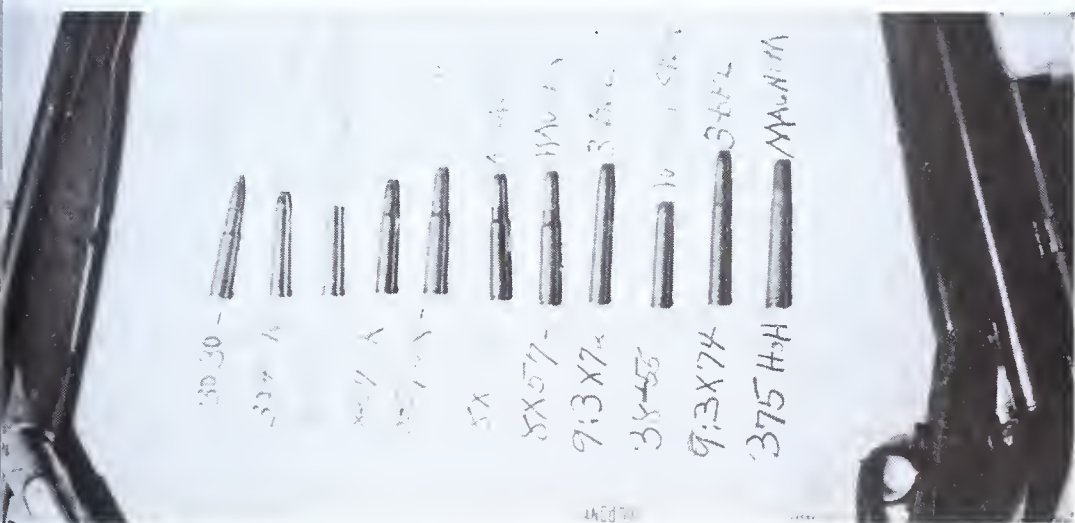
The three barrel gun or 'drilling,' as the Germans called it, is a product of central Europe which is the real home of the combination gun. Before the war the majority of German and Austrian sportsmen of rank owned combination arms of various designs. These hand-made precision guns were not makeshifts like the Paradox and Europas. They combined at least one genuine rifled barrel with one or more shotgun barrel. The usual run of them were three barrel or 'drillings.' The rifle barrel is beneath the double shot barrels or they can be just the opposite with a shotgun barrel under two rifle barrels. However, rifle under double shot barrels is in the vast majority. The ultimate in these combinations is probably the four barrel gun with two shotgun barrels side by side and two rifle barrels one above the other underneath. One of these rifle barrels was usually 22 rim-fire or 22 hornet caliber while the other was anything from their 5.6X52R, (22 Savage H.P.) to the tremendous 9.3X74R. German and Austrian manufacturers will make most any combination one would wish. I have seen them with 22 cal. hornet in the rib above double 12 gauge shot barrels while an 8X57JRS rifle barrel was beautifully fitted underneath. Another was a double rifle in 9.3X74R side by side carrying a 16 gauge shot barrel under. Many of these masterpieces carry quick detachable telescopic sights mounted high with a large aperture. The scopes mount under the tube so one can use the iron sights quickly for either shot or rifle.

To simplify matters we will discuss the more common European calibered cartridges and compare them with our common calibers. While they use

our 20, 16 and 12 gauge shotshell borings most all of their guns are bored for the shorter shells instead of our two and three quarters inch standard length. Be careful about this as European shot shells are not loaded near our express and magnum pressures. Our heavy loads are dangerous in these short chambers. Some of the later 'drillings' are made to use our loadings but the most of those brought home by our soldiers are of the older type. The majority of the rifle barrels in the earlier models were chambered for the 9.3 X 72R which is an old straight taper black powder shell that looks like a 38/55-255 Winchester stretched out another inch. 9.3mm means it is .366 caliber by our measurements. 72R means the case is 72 mm, near three inches long and R means a rimmed case. Today they load it with smokeless powder to around 2,000 feet per second velocity with a 200 grain bullet which makes it a fairly good number. Another old number is the 8X58 R, sometimes stamped 7.9X57 or 58. This is a straight tapered case of moderate power slightly longer than our 32/40-165 Winchester and Marlin. One can use our 32/40 cartridge in this arm if he thins the rim so it will allow the gun's action to close. German and British cartridge rims are made thinner than ours. Thin these rims from the underside, but be careful to not weaken the base of the case. If you reload fire formed 32/40's for this caliber, I suggest you seat the bullet far enough out to equal the average length of the German cartridge. Still another similar 8 mm cal. is the 8X57 R which has a slight bottle-neck. The 32/40 Winchester can be fire formed to fit this one but its diameter will be so much enlarged it will not fit above 8X58. Load the bullet well out as suggested above. This is an excellent cartridge.

The most powerful one of this 8 mm series is the 8X57JR and 8X57-





COMPARISON CHART of European calibers with some of our American calibers.

JRS. These are simply rimmed versions of the standard 8mm German military rimless cartridge known all over the world. It is called 8X57 Mauser in Europe. JR stands for barrels with undersize borings of .318 diameter while JRS means its oversized or .322 caliber, so be careful and know the bore diameter of your 8-MM's regardless of whether they are rimmed or rimless. This is a confusing situation overlooked by the majority of 8mm owners. Our cartridge firms try to furnish a happy medium, not too hot, load with a 170 grain bullet that will be soft enough to fill the bore and shoot well in an over diameter barrel or swage down and still be safe in a tight or .318 barrel. Properly loaded the 8X57 Mauser military rifle cartridge and the 8X57JR and 8X57JRS will compare favorably with our unbeatable 30-06 Springfield.

The 7X57R is an excellent number. It is a rimmed version of the popular 7X57 'Spanish' Mauser cartridge, a long range accurate one that seems to live forever. I owned a beautiful Krieghoff 'drilling' using this cartridge under double 16 and am sorry I ever parted with it. We have mentioned the most common caliber

used, the 9.3X72R and I don't want to tire you with some of the uncommon ones but I do want to mention the boss of them all for large and dangerous game and that one is the 9.3X74R. This cartridge is a bottlenecked case 74mm long (three inches) .366 cal. handling a 285 grain bullet at over 2,450 feet per second velocity with near two foot tons of energy. The recoil is severe out of my J. P. SAUER 8 lb. outfit which has an early model Weaver 1X telescopic sight that is ideal for fine shot, rifled slugs or rifle cartridge. Despite the heavy recoil I find this a very accurate cartridge out to 300 yds., the farthest I have tested it. I will say this is the finest firearm I have owned. I believe this rifle barrel is capable of better than three inch groups, using Norma cases and careful hand-loads, at 100 yards range. It will easily group the rifled slugs and rifle bullet in an object no larger than a man's hand at 50 yds. Its shot barrels are 12 gauge chambered for two and five eighths shells. There is no American counterpart that will work in either of these 9.3 German calibers. The rifle barrel on the Sauer is cocked by a lever on the left side of the trigger guard. The back trigger fires it when cocked but goes back on to the left shot

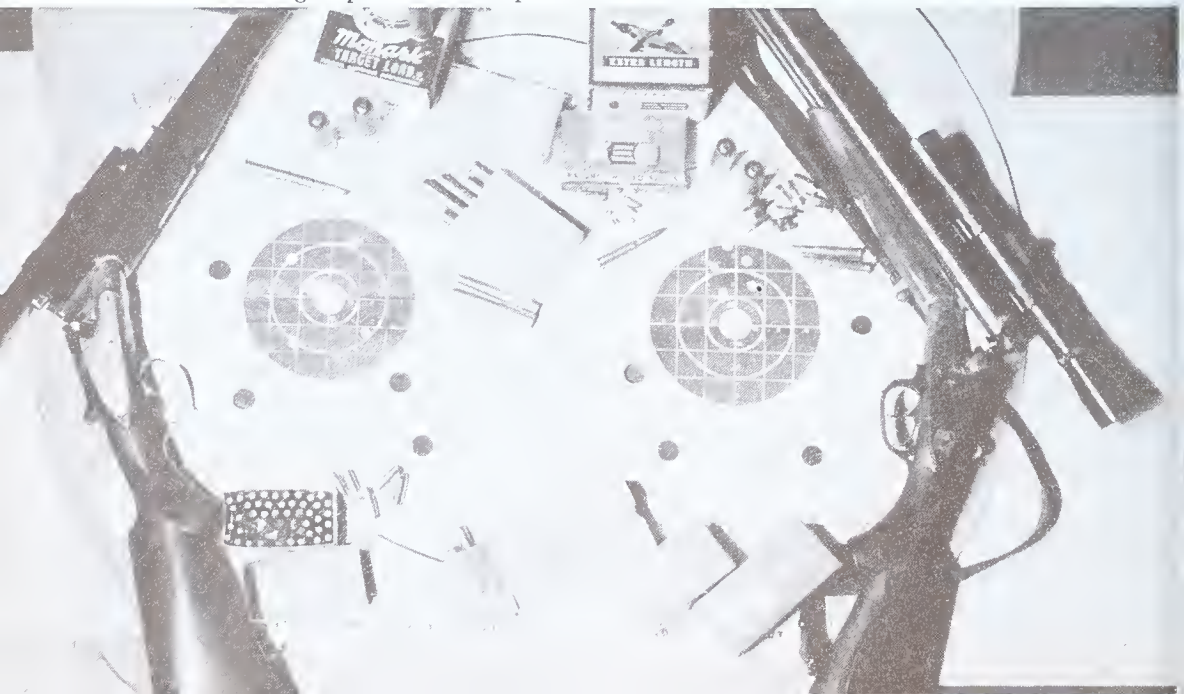
barrel soon as the rifle is fired. Its safety is the conventional safety as used on our doubles.

The Germans call our 30/30 Winchester a 7.62X51 and one will find a few of the newer guns chambered for this excellent cartridge. I have a Gebr-Adamy double 12 gauge with heavy 28 inch barrels bored full and full for our modern shells with the 30/30 rifle underneath. This outfit weighs a few ounces under 9 pounds with a 3X to 7X United variable telescope mounted on a Weaver pivot type base. Here is an outfit that leaves little to be desired for Pennsylvania hunting or just plain woods loafing. Properly loaded with pointed bullets like the 150 grain Sierras, Remington bronze point or Hornaday spire point, and the Sierra 125 grain pointed .308 vermin bullet the 30/30 will group about as good as your best 30 calibers in good bolt actions. These pointed bullets loaded well out are too long for lever action rifles and cannot be used in their magazines. The modern combination gun gets the most out of the old 'thuty-thuty' and few realize just how good

this 65 year old medium sized cartridge is. If I am not getting crows and woodchucks out to 200 yards right along with this firearm I know I am not coordinating somewhere. The 12 gauge barrels handle everything from our trap loads to the magnum loads perfectly and do as good as the Sauer with rifled slugs. The well designed 125 grain pointed Sierra bullet travelling 2750 feet per second out of this precision bored barrel is extremely flat in its trajectory over the 300 yard range, and deadly accurate. The 150 grain bullets are not far behind.

Most all of the German and Austrian three and four barrel guns are mechanical masterpieces. One cannot help but admire and marvel at the skill and ingenuity exercised by the masters who made them. No two seem to be exactly alike. They are a delight to handle. Most of them have two triggers like a double barrel shotgun, but when a button on the tang is pushed forward a rifle sight goes up on the rib and one of the triggers (usually the front one) is ready to fire the rifle barrel. The Greener style

SHOT PATTERNS fired from combination guns show some degree of accuracy. At left is Varner's J. P. Sauer "drilling" bored double 12 gauge over with powerful 9.3X74R rifle cartridge. It weighs 8 pounds with scope. Firearm on the right is the Gebre Adamy 30/30 double 12. If one used "Kentucky windage" with the shot barrels in each case, an 8 or 10 inch group could be expected.







FINE WORKMANSHIP is portrayed in these guns from the Wesley Franklin collection. At top is a J. P. Sauer over and under using an 8X57R rifle cartridge under a 16 gauge shot barrel. At bottom is a Simpson and Sohn "drilling" double 16 shot barrels over old straight taper 8X58 caliber.

safety on the left side of the stock seems to be used most. The trigger that fires the rifle barrel sometimes functions as a single set trigger by pushing it forward till it clicks into 'hair-trigger' position. The four barrel gun works the same way except the rear trigger has to double for firing one of the rifle barrels as well as the left hand shotgun barrel.

Actually, the 'drilling' and four barrel gun is not an arm for the thoughtless slam-bang, careless nimrod. It does not possess the strength and simplicity of a monkey wrench or our near fool-proof 1894 Winchester. It is a precision instrument, made like a fine watch and requires intelligent use. It's an outstanding arm that calls for pride in ownership.

I have had many inquiries about 'drillings' made in the United States, and why don't we make such firearms today. There were a few made mostly in 12 or 16 gauge double with the 32/40-165 Winchester, and 38/55 Winchester and Marlin rifle barrels underneath. Possibly the 30/30 can be included here. They were manufactured around 1910 near Wheeling, West Virginia by a concern who first called themselves the Wheeling Gun Co., the Three Barrel Gun Co., The Hollenback Gun Co., and finally the Royal Gun Co. I believe they passed out of the picture in 1912. Their firearms sold for \$100.00 to \$500.00 when the dollar was worth a dollar. My friend Herb Wallace in Scranton owns one of these guns in good shape. Despite our high standard of Ameri-

can wages I believe an excellent over and under combination can be made at a price that will interest the average consumer. The three and four barrel guns are something else. There is so much hand-work on the actions and testing in paralleling the barrels they would cost as much as an average automobile.

In conclusion I will say, the combination gun and especially the 'drillings' and four barrel masterpieces are not only a fine example of the gun-makers art but under many conditions are the most useful of all firearms. If you own one in good condition consider yourself fortunate. If you ever need expert service on these intricate arms I suggest you take no chances on having them repaired by the inexperienced. I suggest sending them to Griffin and Howe Inc., New York City or some reliable firm that handles this type of merchandise. Do not get me wrong. I am not contradicting my stand in the January issue on old military junk and run of the mill, mass production European firearms. The combination gun is in an entirely different category. Their sales are so few and far between due to price they will in no way affect the economy of our good American firearms. Maybe in the not to distant future one of our firms will find a way to produce a 'drilling' the average shooter can buy. Until then try to sock that big owl with whatever you have and hope for at least a good American over and under rifle and shotgun combination gun.



## OUTDOOR FUN WITH A FUTURE



# Fun With Spring Birds

By Ted S. Pettit

Illustrated By G. Don Ray

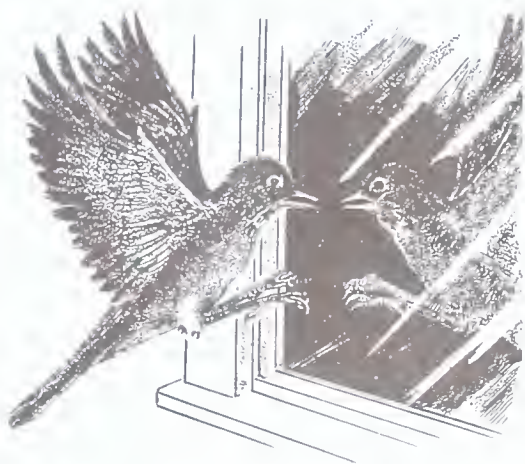
**F**OR most outdoorsmen March is "an in between" month. Spring is just around the proverbial corner and one day may see cardinals singing from the hedge or thicket and the next may see four or five inches of new fallen snow on the ground. It's the time of year when birds that nest far to the north but winter in Pennsylvania feed on your window-sill along with birds that wintered to the south and nest not far from your yard or farm. It's the time of year when evening grosbeaks and cross-bills may sit in the same tree at the same time with redwings or robins or when a snowy owl from the arctic may soar over a marsh where early migrant woodcocks are feeding.

March may not be either winter or spring, or it may definitely be one or the other. But it is a month when several species of waterfowl are passing through on the way north to nest a month when some of the hawks and owls are either starting to nest or even at the stage where they are feeding young; a month when new birds arrive, almost every day, and a time when you can hear one of the most thrilling sounds in all of nature, the flight song of the woodcock.

Trips afield in March and early April can be exciting indeed for any one who thrills to the approach of a new spring season, and all that that means in the world of nature. But much depends upon the weather and oftentimes spring is late in arriving. With an average season, though, here are some things to watch for from now until mid-April.

### Bird Migration

One of the most interesting and not too well understood phenomena of the world of nature—bird migration—becomes evident during March. Inevitably, newspapers and radio newsmen announce with some authority that spring must be here. The first robin has been seen in somebody's backyard. But that robin may have been in the area all winter and just now is recognized for what it is.





But the sight of a flock of mallards circling a recently thawed pond or a slow moving part of the river; flocks of male red wings suddenly turning up in the marsh or swamp; several robins in the park or orchard; male bluebirds perched on roadside wires or fence posts and flocks of geese high overhead usually indicate that migration has started and that wave after wave of birds are moving northward as weather and wind permit and as food becomes available.

Ornithologists—those people who study birds and their habits as a hobby or vocation—long tried to find the answer to what made birds start their migration northward. The entire answer is not fully known, but there is evidence to indicate that the lengthening hours of daylight in the spring stimulates the reproductive urge of birds. In turn this urge causes them to move north to their ancestral breeding grounds, whether those breeding ground be the arctic tundra or your backyard in Pennsylvania. In the same way the lengthening of daylight hours in January and February stimulates hawks and owls which winter here, to nest and breed.

Careful experiments carried out on woodcock singing grounds show that the males start singing about one minute later each evening, which is in relation to the later setting sun each day, and the slightly longer period of daylight. Of course, cloudy days may interrupt this schedule, but records kept for several years and correlated with meteorological reports on the time of the setting sun bear out this idea.

Another interesting thing about migration that has been discovered is the birds usually fly north when they have a tail wind that helps them along. When they come to a head wind or a cold front, they stop and wait for favorable weather. This may account for "waves" of birds during the spring. On one day there may be no birds other than the usual resi-



dents—birds such as jays, chickadees, nuthatches, woodpeckers and titmice. Then the next day you may see bluebirds, robins, redwings and a larger number of jays. In a day or two more, we are back again to our original resident birds for a few days, then another wave comes through.

This is more evident in late April and May when warblers, thrushes, orioles and tanagers stop to feed on their way north. Most of the birds fly at night and stop during the day to rest and feed. But birds such as swifts and swallows that feed as they fly migrate by day as do hawks that take advantage of wind currents, coasting along on updrafts with little effort and few wing beats.

Many times, warm weather in the south results in birds arriving here earlier than usual. Song sparrows, robins and bluebirds may arrive in February or early March, then be forced to stay or even retreat, by cold snowy weather. There are records to show that on one or more occasions such early migrations have been disastrous for some birds, especially bluebirds. Very cold weather and lack of food caused large numbers to die of starvation.

When you read in the paper that spring is here because robins have been sighted, you can snicker to yourself. The writer didn't know much about the mechanics of migration.

### Early Nesting Birds

Several species of birds nest in Pennsylvania as early as February and frequently in March. Probably the first to nest is the horned lark, blue-bird sized, brownish above and on the sides, with white on the forehead and black marks across the forehead, mouth and throat. As the name indicates, it appears to have "horns."

These are birds of open country and sometimes nest on golf courses and airports, as well as in farm country. The nest is usually close to a clump of grass or a small shrub, and often is built as early as February. Snows frequently cover the nests and force the birds to abandon their eggs. But many birds successfully nest in light snows, and nests have been found that were literally at the bottom of a hole in the snow. Horned larks are seed eaters, and feed in weed patches and along roadsides.

If while walking across an open field you come upon a lark fluttering about on the ground as if it had a broken wing and is in the throes of death, the chances are good that you are close to its nest. Back up a few hundred feet and watch the bird carefully. It will return to the nest. Mark the spot carefully and you may find it, and see the earliest nester in the state.

Horned owls, red-tailed and red-shouldered hawks also start building their nests in late February or March. The owls may have young in the nest by mid-March, and the outdoorsman may occasionally see hawks carrying twigs and sticks to a deep woods where they build their nests high in a tree.

Owls usually nest in a last year's hawk or crow nest which should provide a hint as to where to look for them. They are not as common as hawk nests, but if you remember where you saw crow or hawk nests deep in the woods, check them carefully in late February or March. You may not see the birds, since they will probably hear or see you coming and flee ahead of you. But look on the ground under the nest. Odds and ends of bones, feathers and fur and owl pellets—thumb-sized bundles of undigested bones and fur—are a good indication that a horned owl is nesting there.

As you hike or drive in March, watch for flying red-tailed or red-shouldered hawks and look them over carefully with binoculars. If they are carrying twigs or sticks watch where they go and you may find the nest. They are usually high in a tree and sometimes you can watch the hawks build their platform nests from a distance.

One of our most interesting game birds—the woodcock or "timberdoodle," whistler or woodsnipe as it is known to old timers, may also nest early and get caught by a late snowstorm. Some nests have been found in March and many in early April.

The woodcock is well known for its flight song—heard at dusk on early, warm nights, over a field or swale where it feeds and nests. This song is the effort of the male to attract a mate and both the song and flight must be heard and seen to be fully appreciated. It's well worth all the time it takes to drive around and find a woodcock singing ground. For once





you find it and spend a couple of evenings there, you'll go back year after year. Whole chapters in books have been written about the woodcock's song. But still, even to professional conservationists, it is one of the more "mysterious" of our game birds and some of its habits are not yet understood.

### Bird Territories

With most migratory species of songbirds, and some other birds too, the males arrive days or even weeks before the females in an average season. This is easy to see in the case of redwings and bluebirds which nest in Pennsylvania and where it is easy to tell males from females.

Very soon after arrival, the male bird finds a suitable area—its territory—that will be its nesting area for the season. The size and shape of these territories differ, and generally are determined by the landscape and topography.

Within this territory, the male selects one or more perches from which he will sing and proclaim to other males of the same species that he has staked out this area as his home. If other birds of the same species enter the territory, he will defend it, fighting if necessary. He also sings and displays his plumage in various ways to attract a female to the territory to nest. In some cases birds that first establish a territory are driven away by older or stronger birds of the same species, but usually the first one there, stays there. Females too, when they arrive and accept a male and his territory, help to defend it against other birds of the same kind.

Some birds will attempt to defend their territory against all birds. But usually, they try to drive away only birds of the same species. Usually, too, the "territory" is the nesting area. Robins may feed together on a large lawn or golf course with no conflict, but when back on their nesting territory, they repel other robins. Other

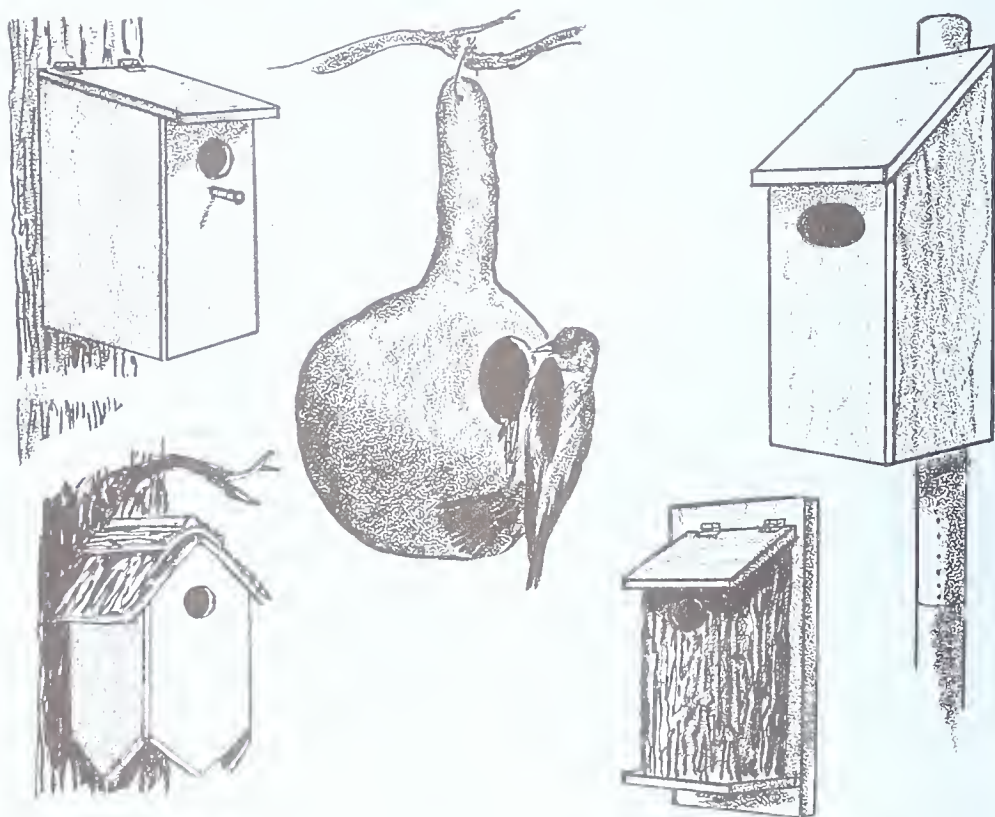
birds may have feeding territories too. With most birds the territorial instinct lasts only during the nesting season, and as the season progresses and young are hatched and leave the nest, they lose interest in defense of the territory. But other birds may have a winter territory too, which is the same or a different area than that which they defend while nesting.

This territorial instinct is another natural phenomenon that causes newspaper writers to go great lengths to try to be amusing. Almost every spring sees a story or two about "crazy" robins or cardinals. Those birds are so crazy that they fly at picture windows or shiny automobile hubcaps until they nearly beat their brains out.

In truth, these birds see their reflections in glass or chrome and are trying to defend their territory by driving the "other" bird away. There are several stories, too, about "crazy people" who heard a noise in the middle of the night and got up to investigate. They saw their own reflection in a mirror or window and promptly shot a hole in the glass. The natives are much the same. Both animals—robin and man—are instinctively trying to protect their home and young.

But this territorial instinct of birds is an interesting thing to see for yourself, and easy too. Most suburban areas, parks and farms are nesting sites for robins and song sparrows. Many times territories will be immediately adjoining as does your backyard and your neighbor's. First look for the favorite singing perch of the male. Then watch for other birds of the same species and see how close together are the perches which usually are well within the territory. By careful observation it is often possible to define rather closely the limits of a birds backyard.

Knowing about this territory also gives you a clue as to how to set out



bird houses in your yard or garden. Houses for the same species of birds will not be used if placed too close together. But a wren house, tree swallow house and bluebird or chickadee house could be placed within half an acre and might well be used by different species. These birds may have their own territories, but they do not usually defend them except against birds of their own kind.

### Nesting Boxes

March is about the outside date when bird boxes should be set out for successful use the same nesting season. Birds seem to prefer boxes that are at least slightly weathered and many times, the older they are the better.

Bird boxes should be made for specific birds, not for anything that comes along. The following chart

gives suggested sizes and other specifications for those birds that regularly nest in cavities and the illustrations show a few of the more or less standard types of boxes that are easy to build.

But building boxes can sometimes be a frustrating experience. One friend of ours went to some length to build a fancy wren house. When the wrens arrived they looked it over, went in and out and then nested in a flower pot on the garage window-sill. Another friend spent hours in his basement shop making a house for wrens only to have them nest under the house in a rotted out hole in the post upon which the house was placed.

Building and setting out nesting boxes can be a rewarding experience though, and a great deal of fun. But get at the job now, so that when the birds arrive the houses are ready.





# Dogs And The Law

By Horace Lytle

**O**WNERS often do not realize their rights where dogs are concerned. Or may imagine rights they don't have. Legally, it has been held justifiable to kill a dog running through a wheat field, or lying on a bed of young garden plants, and, although the contention has been made that the law at least contemplates the instrument of injury or mischief used by the dog must be his teeth and not his feet or body, the only answer available unhappily is, that "It is as truly mischief on the part of a dog to uproot garden vegetables with his feet, as to pull them up with his teeth."

However, a dog may not be killed that merely (a) leaves tracks on a freshly painted porch, (b) is found once in a henhouse, (c) comes about the house at night, (d) chases cats, (e) barks. Nor does the barking or howling of a dog justify killing him, if the noise can be otherwise prevented.

The fact that a plaintiff's fowls are frightened at a dog's appearance, and run from him, will not authorize the dog's destruction unless he does something more than "look fierce" at them.

In Blackstone's time a mere dog could be stolen with impunity. Dogs then were the subject of property in a very limited and qualified degree, and were regarded as being kept only through the whim or caprice of their owners. Cats, turkeys, and even peacocks were things of value, but dogs were not the subject of larceny, as far as criminal law was concerned.



Yet even in Blackstone's day, though dogs were worthless in contemplation of law, they nevertheless enjoyed veneration and esteem. To quote: "From the building of the pyramids to the present day, from the frozen poles to the torrid zone, wherever man has wandered there has been his dog. Cuvier has asserted that the dog was, perhaps, necessary for the establishment of civil society, and that a little reflection will convince us that barbarous nations owe much of their civilization above the brute to the possession of the dog. He is the friend and companion of his master, accompanying him in his walks, his servant, aiding him in his hunting, the playmate of his children; an inmate of his house, protecting it again all assailants."

Few men have deserved, and few have won, higher praise in an epitaph than the following, which was written by Lord Byron in regard to his dead Newfoundland: "Near this spot are deposited the remains of one who possessed beauty without vanity, strength without insolence, courage without ferocity, and all the virtues of man without his vices. This praise, which would be unmeaning flattery if inscribed over human ashes, is but a just tribute to the memory of Boatswain, a dog who was born at Newfoundland May 3, 1803, and died at Newstead Abbey November 18, 1808."

On the other hand, when an owner sued a railroad, the dog was referred to as an animal whose nature is carnivorous, and who is prompted by instinct and appetite to roam at large in the forest in pursuit of game, or upon a sheep-killing expedition, and finally stigmatized him as a "yelping cur," whose presence upon a railroad track should not arrest in its progress a train of cars freighted with products or passengers. It may be said that before the courts the dog has received a treatment as varied as that given him on the one hand by those

who love him—and, on the other hand, those who do not.

During the nineteenth century, dog law underwent many radical changes. For centuries he had enjoyed the humiliating privilege of being exempt from attachment or execution. Soon, however, he began gradually to rise to the high estate enjoyed by lions and tigers; horses, cattle, chickens, and canary birds, all of which had been held to be property while the dog was not. "It would be an interesting survival of archaic law," said the author of the opinion that clinched the point, "to say that a showman could put up his tent and give nightly exhibitions of his valuable dogs, making large sums of money from them, get in debt to any given extent, laugh at his creditors and proceed with his daily exhibitions, on the ground that his stock in trade is not subject to levy."

In *Mullaly v. People*, the court said very enthusiastically that "when we call to mind the small spaniel that saved the life of William of Orange and thus probably changed the current of modern history \* \* \* and the faithful St. Bernards, which, after a storm has swept over the crests and sides of the Alps, start out in search of lost travelers, the claim that the nature of the dog is essentially base and that he should be left a prey to every vagabond who chooses to steal him, will not now receive ready assent."

You can still get into legal complications with your dog, or dogs; yet if you do, it is well to know where you stand legally in the matter. You may feel like just taking the law into your own hands. It may prove much wiser, however, if you go to a good lawyer for the law. If your dog is properly licensed, and bears the tag indicative thereof, he is subject to whatever legal protection such license guarantees. Unlicensed, stray dogs may not thus enjoy the law's protection as to property.



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APRIL, 1959

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# THE STORY BEHIND THE COVER

SOME of the “wonder” may have worn off the Weimaraner since its introduction to American sportsmen two decades ago. But the fact remains that here is a remarkable gun dog. This German breed, originated at the court of Weimar some 135 years ago, was brought to this country with almost too much fanfare. The fabulous claims of its promoters have mellowed a bit with age, but the Weimaraner still ranks as one of the most outstanding, general purpose hunting dogs ever developed.

The nobles of Weimar who started the breed wanted a dog that could do everything—point, retrieve, trail, work in all sorts of cover and all kinds of weather. With it all, they wanted a loyal, loving companion and house dog. Once this “wonder dog” had been developed, mainly from the old red Schweisshunde—a sort of super-bloodhound which provided the background of most German hunting breeds—these noblemen formed a tight club, members of which abided by the most strict rules and breeding regulations. The dogs were never kennelled but stayed with their masters continuously, even on trains and in bedrooms.

In 1929 Howard Knight of Providence, Rhode Island, managed to bring a pair of Weimaraners to America. The Weimaraner Club of America formed soon thereafter followed the same strict rules and policies of the original German club. Even today, it is not easy to get a Weimaraner and every precaution is being taken to confine ownership to people who will hunt these dogs.

“Gray ghosts,” nicknamed more for their stealthy work on game rather than their silver-gray appearance, are highly intelligent, versatile dogs with excellent noses, a well-defined pointing instinct and a natural tendency to work close to the gun. They are large dogs, males weighing from 65 to 85 pounds and females about ten pounds lighter.

Fritz V. Wehmann, the Weimaraner cover boy so well portrayed by Iwan Lotton on this month's cover, was a veritable sensation when his Derby debut was made in the fall of 1953 against New England competition. He won six consecutive firsts and continued to pile up an amazing record of wins. Owned by G. H. and R. G. Wehmann of New York city, his career total is a half-a-hundred placements, including a victory in the National Weimaraner Championships in the fall of 1956 and a second crown in the Eastern Championships in 1958.



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## PENNSYLVANIA GAME NEWS

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APRIL, 1959

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## Editorial . . .

# The Web of Life

**A** STICK, a stone, a trickle of water, all hold their mysteries. Eons ago man quizzically studied them. He handled them, felt them, fondled and tasted them. He even salaamed to them at one time or another because he could not completely understand them.

He was a stalker, a hunter, not far removed from the animals he preyed upon. But as winds and water wear away mountains of stone, time wore upon man. He changed, subtly at first, more dramatically as time went by.

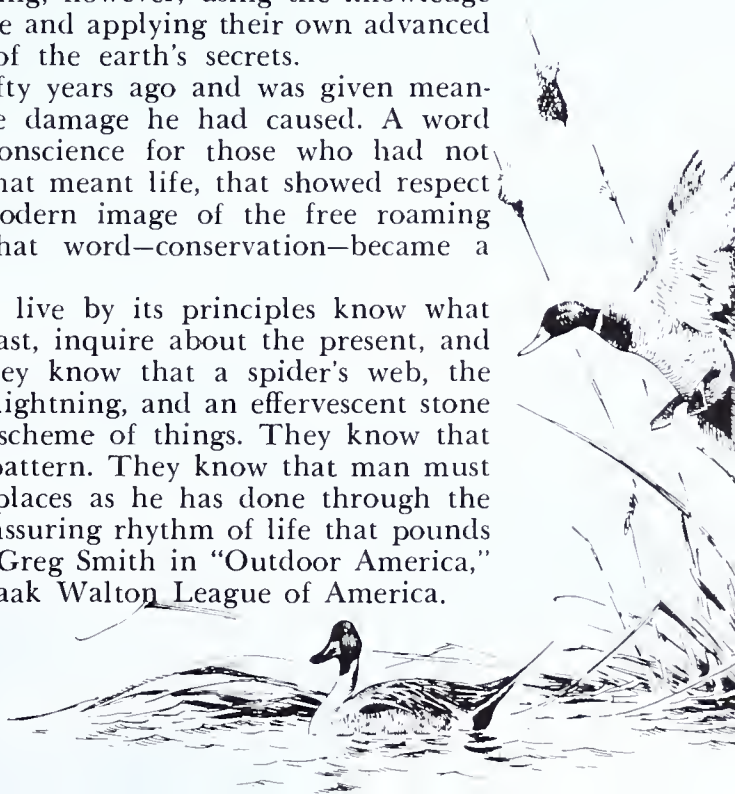
He learned that there was power in water, strength in fire. He tried to conquer them because he was what he was—man. He tested, remembered, discovered, and learned from others—generation after generation—until he was master of all he surveyed.

Testing caused error, power prompted greed, and as a result what had been curiosity erupted into a destructive force that destroyed many of those things that had fascinated him. He was tampering with life and was consumed by the consequences of his curiosity.

The pattern of history has been built on the dust of these errors and each time man rises to greater heights than he had before. We are at that point now. Our technicians are far removed from those who quizzically studied the contours of a stone. They are still tampering, however, using the knowledge of those who had gone before and applying their own advanced thinking to discover more of the earth's secrets.

A word was born some fifty years ago and was given meaning when man surveyed the damage he had caused. A word was born that became a conscience for those who had not learned. A word was born that meant life, that showed respect and gave dignity to the modern image of the free roaming predators of ages past. That word—conservation—became a cause.

Those who have come to live by its principles know what it means to reflect on the past, inquire about the present, and contemplate the future. They know that a spider's web, the tides of an ocean, a bolt of lightning, and an effervescent stone all have their place in the scheme of things. They know that man is only a part of this pattern. They know that man must often seek out those quiet places as he has done through the centuries, to listen to the reassuring rhythm of life that pounds within and around him.—J. Greg Smith in "Outdoor America," official publication of the Izaak Walton League of America.





# Smokey--The Fire Preventing Bear

By Larry Stoltz

**I**F YOU should happen to visit the National Zoological Park, in Washington, D. C. in search of Smokey—the Fire Preventing Bear, it should be easy for you to find the cage where he lives. The chances are good that it will be surrounded by excited children—many of whom have traveled long distances to see their old friend.

You might be puzzled to see a

bear the color of brown taffy pacing up and down in a cage reserved for a black bear. But if you remember that the American black bear sometimes has a brown color phase too, you should have no difficulty in accepting this one as the original Smokey.

To really appreciate Smokey Bear, and all that he stands for, you will need to shed your adult sophistica-



tion. For the moment at least, you should become a child again, because Smokey is not just a run-of-the-mill sort of bear to kids. A child's imagination can do wonderful things. It can even endow a bear with human qualities, and a real personality. This it has done. For this reason, children see nothing incongruous in the colored poster on Smokey's cage that depicts a bear standing up like a man, with a shovel in his paw, and wearing blue jeans and a ranger's hat. To them, the bear that walks flat footed on all-fours around the cage, or sits up and begs, is the same one that appears dressed as a man on fire posters all over America.

Nearly a decade ago, in May 1950, this same Smokey Bear was just a tiny cub padding happily along beside his mother over the tinder dry slopes of the Capitan Mountains on the Lincoln National Forest in eastern New Mexico. For days, high

winds of near gale proportions had been blowing across the Capitans. They had sucked out the last vestiges of moisture from the powdery soil, and the vegetation that clothed it. "Dust Devils," harbingers of disastrous fire weather, danced like whirling dervishes across the landscape. The dry grass, between the openings in the ponderosa pine forest, rustled as the wind lashed it. The song of the wind in the pines was the prelude to a song of death.

In the heat of mid-day, the deer were bedded down in the shade of the forest, and brightly colored butterflies rested on twigs that were as dry as sun bleached bones. The water in a nearby brook was getting low and the trout were concentrated in the few remaining pools that still offered sanctuary.

Under the great pines, away from the beating sun, the mother bear searched for fat, white grubs in

**FLIGHT TO FAME** for Smokey took place when the tiny survivor of a New Mexico forest fire was flown from Santa Fe to a hero's welcome in the Nation's Capitol.



rotten logs that she flipped over like match sticks and tore apart with her powerful paws. A huge ant hill became a scene of frenzied activity as she raked it with her claws. The little cub was fascinated by the swarms of great black ants that milled around their shattered home. He poked his shiny, black nose into the thick of them. They covered his muzzle and bit savagely wherever their powerful jaws could penetrate.

In the animal world, during that happy period before Man—the hunter—first trod the slopes of the Capitans, fire was a rarity and came only from a lightning bolt striking a dead tree. Then came the first bands of Mongol hunters from Asia. With them, they brought fire to roast their meat, and to use as a tool to drive the game before them in the hunt.

On this bright day in May, 1950, the sky overhead was a blue bowl—cloudless and pitiless. But the forest was safe today from the fire god that so often poked its crooked finger out of the sullen thunder head to blast a tree into a flaming torch. The Indian hunter, with his flint tipped hunting arrow and his fire drill, was only a memory, but his old hunting ground was now occupied by the stockman, the lumberman and the recreationist. The forest, with its tinder dry fuel, was ripe for disaster if some one should be careless.

No one knows how it happened. The wild animals of the forest do not set fires. There had been no jagged lightning bolts to ignite a tinder dry snag. So, man must have been the culprit. Perhaps a smoldering campfire was left unattended, or a smoker tossed a lighted cigarette. Only a tiny spark was needed in the explosively dry fuel, and man furnished the spark.

At the start, the fire spread over an area no larger than could have been covered by a sleeping bear cub. A bucket of water, at the right time,

could have knocked out the flames and a shovel full of dirt could easily have completed the job of extinguishing the fire. From a small beginning—one that could scarcely have flung a warning smoke column above tree top level—the fire built up momentum. The wind played tag with the flames, unrolling their hot dragon tongues to lick up the dry grass, and pine needles. Like the genie escaping from Aladdin's magic lamp, until it grew into a turbanned monster that filled the room, the fire developed from the tiny flame of a single match into a roaring, raging wall of flame that consumed everything in its path.

The wild animals sensed the tragedy that was about to engulf them, and ran for their lives. Some got confused and ran back into the flames where they perished. Perhaps that is what happened to the little bear cub's mother whose first duty was to her baby. The smoke, the roar of the flames fanned by high winds, the dull thud of falling timber, the searing heat and the confusion. These things were foreign to the mother bear's way of life.

Not only did the wildlife of the forest suffer and die, but many human lives were threatened. Twenty four fire fighters became trapped on a rock slide by the ugly flames that lashed out at them from blazing tree tops as the fire crowned. They lay face down among the rocks. To keep from smothering, they wet their handkerchiefs from their canteens, and covered their faces. The heat was so terrific that some of the fire fighters' clothing burst into flames, and had to be beaten out by their companions.

Although they all escaped death, their hair was singed and their clothing and shoes were scorched as they felt the hot breath of the forest fire that blackened 17,000 acres. These soldiers, turned fire fighters, had battled an enemy that gave no quarter and asked none. When the





A LIVING SYMBOL of forest fire prevention examines one of his poster messages from his present home in the National Zoological Park, Washington, D. C. The young lady is Judy Bell, daughter of New Mexico Game Warden Ray Bell who raised the cub after he was first found.

Flames had subsided, the weary troops found a tiny bear cub clinging to a small ponderosa pine. This was the only living thing that they saw in the blackened waste around them. Gently, a soldier helped the terrified cub down from his perch. Its brown fur matched the cinnamon colored bark of ponderosa pine.

The search for the cub's mother proved fruitless, so the troops decided that she had perished in the flames. They carried the little cub, with the singed paws, back to the fire camp. There, he was fed warm milk and salve was applied to the pads of his scorched feet. Ross Flatley, a local rancher, volunteered to take him home for the night.

The next day, Ray Bell, a New Mexico Game Warden, bundled the little bear into the cockpit of a Game Department plane and flew him to Santa Fe where a veterinarian treated his paws and placed him on a diet of pabulum and milk.

Ray kept the cub at his home for six weeks. During this time, Smokey played with his five year old daughter, Judy, and her little puppy. It is significant that Smokey Bear became popular with children at an early age.

In July, New Mexico's Assistant Game Warden Homer Pickens flew with the cub to Washington, D. C. in a plane provided for the occasion by a citizen of Hobbs, New Mexico. No commercial airline would take a bear as a first class passenger so a private plane had to be used.

When Smokey arrived in Washington, he was given a hero's welcome. Chief Forester Lyle Watts, of the U. S. Forest Service, accepted Smokey as a gift to the State Foresters and Uncle Sam's Forest Service from the New Mexico Department of Fish and Game. He became a living symbol of forest fire prevention to the children of America. During his first year in Washington, he often ap-

peared in parades and at other public gatherings, but he had a bad temper and he was growing fast. Soon, he became too large to handle, and has been confined to a cage of his own in the National Zoological Park ever since.

That day in July, 1950, when Smokey was delivered to the zoo, might have been the end of a promising career for the bear with the singed paws. But it was only the beginning. The children of America took him to their hearts, and the story of Smokey Bear is one of the biggest success stories of the twentieth century.

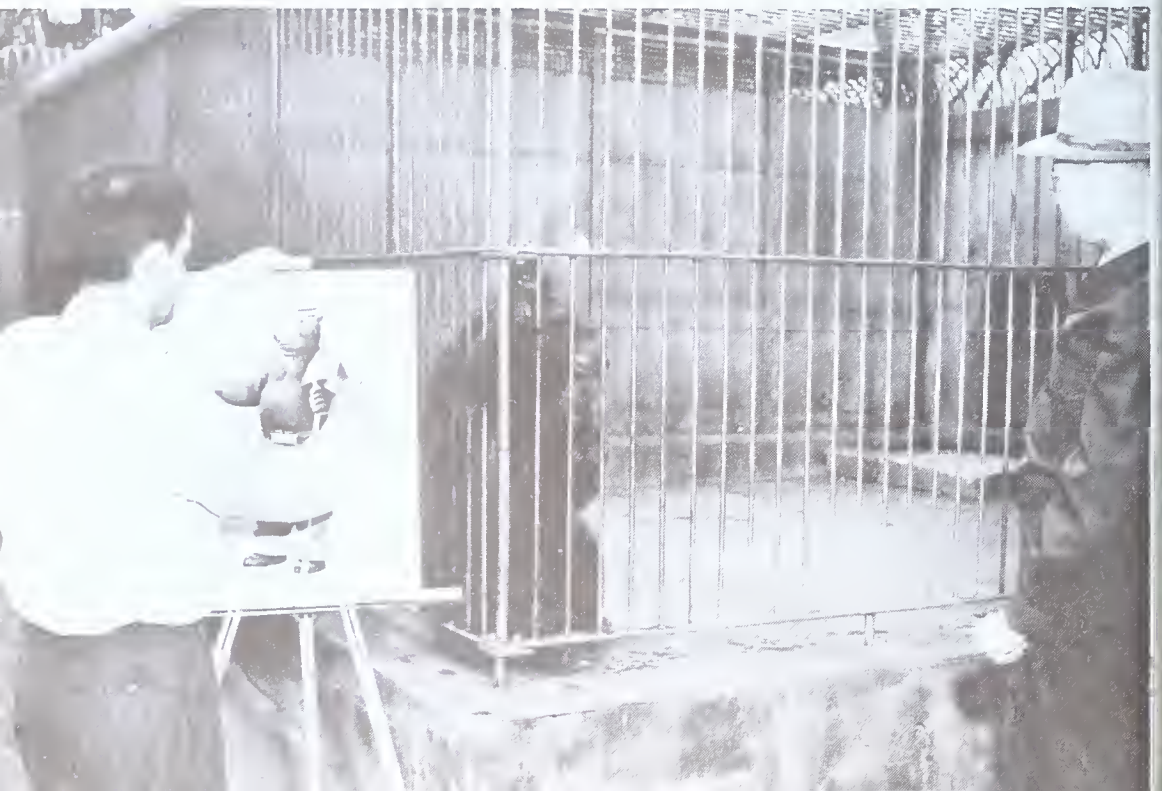
Six years before Smokey Bear became the nation-wide symbol of forest fire prevention, the stage was set for the appearance of an animal character on fire posters.

Advertisers knew from experience that pictures of animals and children caught the public's eye more than any other kinds of illustrations. Since animals and forests were a natural combination, a poster featuring Bambi the deer was used in 1944.

Although this proved very popular, a deer could not be humanized and so it was felt that Bambi was not the answer. Someone suggested a bear. Then the name Smokey was suggested. Soon this imaginary bear was dressed up as a forest ranger with a shovel in his hand. Although a number of people were involved in the creation of Smokey Bear, it was the Advertising Council and Foote, Cone and Belding who were officially responsible for his creation. The first Smokey Bear poster appeared in 1945 and its success exceeded all expectations. But when a real Smokey Bear appeared on the scene in 1950 the success of a humanized bear, as a symbol of forest fire prevention, was assured.

How effective is a forest fire prevention campaign such as the one sponsored by Smokey Bear? Fortunately, we know the answer. Back in 1942, when the U. S. Forest Service took its problem of fire prevention to the Wartime Advertising Council, we were averaging 210,000 forest fires a year in the United

THE BEST KNOWN POSTER SUBJECT in America poses while an artist starts another visual message of forest fire prevention.





States, and burning 30,000,000 acres. Since then, the number of fires and the acreage burned over, has dropped steadily. The drop was rapid during the war years, when gas rationing was in effect and few people could vacation in the forests. Immediately after World War II the number of fires shot up rapidly until the end of 1946, when they again dropped. This drop has continued ever since even though use of the forests has tripled. In 1957, we hit a new all-time low of 8,300 fires and an acreage burned of only three and one-half million acres.

If we place an average value of forty dollars an acre on the timberland of America, Smokey—The Fire Preventing Bear—has been saving us ten billion dollars a year. This has been accomplished through a coordinated nation-wide campaign conducted jointly by the U. S. Forest Service and the State Foresters under the sponsorship of The Advertising Council Inc.

The colored posters, featuring Smokey Bear and his fire prevention message, are as familiar to the city dweller who rides the crowded subway to work as they are to the ranch hand who tethers his saddle horse in front of the general store in a lonely cow town. Through the medium of posters, car cards, TV trailers, radio platters, newspaper ads, blotters, bookmarks and Smokey Bear stamps the fire prevention message is brought before every American.

By 1952, Smokey Bear became so popular that Congress found it necessary to pass a law protecting his name and character from unauthorized use or misuse. A violation of the Smokey Bear law is a violation of the U. S. Criminal Code. The law provides that the Secretary of Agriculture is authorized to issue licenses for the manufacture and sale of commercial Smokey Bear products. To date, about 30 Smokey products have been licensed including Smokey teddy bears, wallets, belts, T-shirts, scarves,



AMERICAN CHILDREN have taken Smokey to their hearts. His posters are as familiar to city dwellers as they are to farm boys and girls. The famous bear probably is saving us ten billion dollars a year.

ash trays, blue jeans, hats, books, comic books, automobile snuffers, songs, records. All money collected through commercial licensing is used for furthering the nation-wide Cooperative Forest Fire Prevention Program.

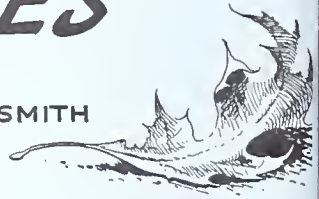
Today, Smokey Bear is as familiar to the children of America as alphabet soup, and even more intriguing. He guards the green mansions that house and feed the other animals of the forest, and which furnish America timber for a thousand uses. He protects the precious water supplies that provide good fishing, boating, swimming and clear water for municipal, industrial and irrigation use. Each year, he prevents thousands of little fires from ever getting started, and in so doing saves countless lives among the human and wildlife populations.

His greatest appeal will always be to the children of America and thanks to him an entire generation—the men and women of tomorrow—has taken to heart the Smokey Bear message—"Only *YOU* Can Prevent Forest Fires," and they will not let him down.



# WALKIN' SHOES

By NED SMITH



## Greens From Nature's Garden

1. Pokeweed is a poisonous plant. True or false?
2. Dandelion is best after blossoming. True or false?
3. What are "fiddleheads"?
4. What well-known salad plant grows in the water?
5. Why is the water changed several times when cooking wild greens?
6. Milkweed shoots can be eaten like asparagus. True or false?
7. Marsh-marigold leaves make a splendid salad. True or false?
8. Dandelion was a popular food of the early American Indians. True or false?

**I**T takes a heap of talking to convince most folks that lots of wild plants—yes, even weeds—are every bit as delicious as the more conventional greens we buy in the grocery store or raise in our own gardens. Here in Pennsylvania dandelion and watercress are just about the only plants commonly found in the wild state that have found ready acceptance, but in other parts of the country extensive use is made of many others. Pokeweed, dock, sorrel, and similar plants find favor in the South. In parts of New England fern fiddleheads are quite popular. Some of the plants are actually commercially canned and some are sold in the fresh state in city markets.

Aversion to eating wild plants can generally be attributed to distrust of the unfamiliar. Once this inborn prejudice is overcome such dishes as marsh marigold or milkweed shoots tickle the palate as effectively as asparagus or spinach.

Wild greens that are not intended for salad use should be cooked in two or three waters to remove all traces of bitterness or "green" taste. Otherwise they are prepared much like similar cultivated greens. Pick only young, tender plants that are free from insect infestation, and prepare them as soon as possible after gathering.

Here are some choice ones:

**Dandelion**—Although I must confess to a fondness for the stuff, I still enjoy gathering dandelion as much as eating it. Perhaps it's the lure of spring sunshine coming on the heels of a long hard winter that makes the task so pleasant. Whatever it is, dandelion hunting is something to look forward to.

The plants are collected as soon as they attain sufficient size, and at any rate before blossoming. With an old knife cut off the root beneath the ground and carefully peel off the outer layer of soiled, dead leaves. The young greens are generally served as a pot-herb with a bacon-flavored sweet-sour dressing.





MARSH-MARIGOLD

While you're about it, gather plenty of the stuff, for it diminishes alarmingly in volume when cooked.

**Marsh-Marigold**—One of the most popular wild pot-herbs in New England is the marsh-marigold, commonly called "cowslip." Its kidney-shaped leaves can be gathered in April and the deep yellow flowers appear around the end of that month in central Pennsylvania. Look for this plant in marshes and wet meadows.

The shiny leaves and leaf stems are pinched off, washed, and prepared like spinach. Finished off in a thin white sauce they are particularly good. It should be noted that the plant contains a poisonous substance that is dispelled by thorough cooking, hence should not be eaten raw. Properly prepared it is perfectly safe and one of the very best of greens. An unusual, but not uncommon, practice is that of pickling the flower buds, resulting in a product resembling capers.

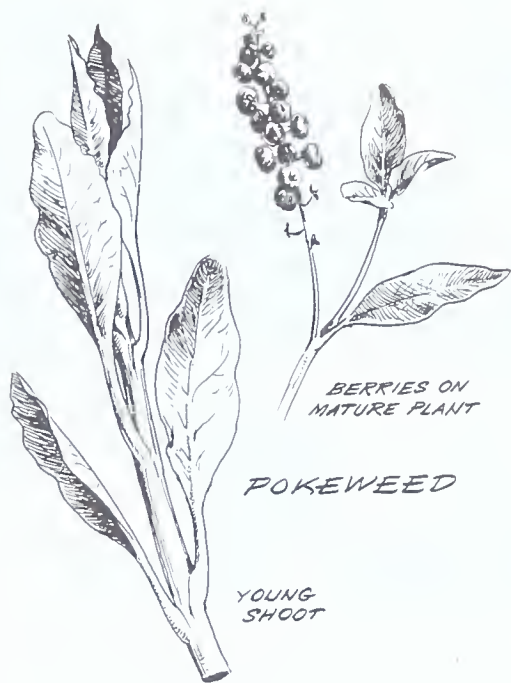
**Pokeweed**—This is probably one of the best of all wild substitutes for asparagus, in some opinions, at least, surpassing even that celebrated plant. It has a splendid flavor and I have

yet to find a stem with the tough fibers typical of some asparagus spears.

Oddly enough, the root of the pokeweed and the old stems that have turned red or purple are extremely poisonous, but the young shoots that are gathered in the spring before they have attained a height of more than six or eight inches are perfectly safe. Snap them off above the ground and strip off the larger leaves. Cook the stems and smaller leaves as you would asparagus and I think you'll find it difficult to say which is the better. For some reason "poke" is not too well-known in Pennsylvania, although in the South it is a favorite green, even to the extent of appearing as a garden vegetable.

As with so many edible plants, the young shoots are easily located by first finding last year's plants. With pokeweed this is simple, for the huge, pale-colored dead stems are conspicuous and unmistakable.

**Milkweed**—It might be well to explain that this is not the plant that resembles dandelion and is called "milkweed" by many Pennsylvania dandelion hounds. The plant under



POKEWEED



MILKWEED

ABOVE - POD ON LAST YEAR'S PLANT  
RIGHT - YOUNG SHOOT

discussion is the common milkweed (*Asclepias syrica*), the one that bears the large pods filled with silky fluff. Several harmful plants somewhat resemble milkweed, but the only one having opposite leaves is the dogbane, also known as Indian hemp. However, it is a more slender growth having a tough, smooth stem that is inclined to fork. It too exudes a milky juice when broken.

The young shoots are the part of the milkweed usually eaten. Choose those six inches or less in height. I usually pull this plant rather than cutting or breaking it. It seems to have a natural breaking point beneath the ground, bringing with it a length of the delicious bleached underground part. Pull off the lateral leaves and cook the shoot like asparagus.

**Bracken**—The mature bracken or brake, is the common un-fernlike fern that grows so profusely in forest clearings, abandoned fields, old burns, and strippings. Unlike many of its relatives it prefers sunshine to shade and dry soil to wet. Its somewhat horizontal, three-parted frond surmounts a tough, long stem.

As food the mature plant is un-

wholesome, but in the spring the young shoots, or "fiddleheads," are eagerly sought for food by many folks. They are easily located by the withered remains of the parent plants. Look for tall, frequently crooked sprouts that divide into three branches near the tip. They are slightly fuzzy, dull greenish in color, and generally tinged with rusty on the curl.

Snap off the stems before the tops have uncurled. Prepared like creamed asparagus and eaten on toast they are delicious. The water should be changed once or twice while cooking them.

**Lamb's Quarters**—Uncounted tons of this delicious plant have been grubbed out of Pennsylvania gardens and tossed unceremoniously on compost heaps to make room for far less tasty cultivated greens. Next time you find a crop of these weeds taking over your garden try cooking a mess before you get rid of them.

The lamb's quarters, commonly called pigweed or goosefoot, is an extremely common weed. Under favorable conditions it attains a height of six feet or more, and at maturity is quite branched and





BRACKEN

ABOVE-MATURE FROND  
LEFT-FIDDLEHEADS



LEFT-LAMB'S QUARTERS  
BELOW-WATER-CRESS



topped with irregular seed clusters.

For eating purposes the leaves from young plants several inches high are used. They can be identified by the shape of the leaves and by their whitish mealy under-surfaces. Prepare them as you would any other cooked greens and I think you'll be pleasantly surprised with the results.

**Water-Cress**—Although not native to our country the true water-cress has established itself as a thoroughly naturalized wild plant in many of our streams. There is a similar native water-cress, but it is less well-known. Water-cress forms dense mats in the water. It should be cut rather than pulled to avoid uprooting the plant. Do not use plants from streams suspected of human or animal contamination.

Water-cress is not cooked but is

used as a salad or for garnishing. French dressing seems to be the favorite accompaniment. Some of my acquaintances stoutly maintain that the only way to eat water-cress is between two slices of bread. At any rate, there aren't many people who don't like it—one way or another.

#### ANSWERS TO THE QUESTIONS

1. The root and old stem is poisonous. The very young shoots are not.
2. False. It is best before blossoming.
3. The young shoots of various ferns.
4. Water-cress.
5. To extract the bitter flavor.
6. True.
7. False. The uncooked leaves are poisonous.
8. False. Dandelion is not native to North America.





# Four H's Spell H-E-L-P

By Keith Schuyler

**W**HAT can I do to help? Whatever the organization or situation, this is about the most negative approach that anyone can make. Those on the positive side don't have to ask questions. They proudly say, "Here is what I did to help."

Every member of the Salem 4-H Club in Luzerne County can take the proud, positive approach. For, each of these 19 youngsters has helped in so many ways.

At a time when so many people are too busy for anything but their own desires and needs, these kids have pointed the way to progress in conservation and are building their own heritage out-of-doors.

Gently herding them in the right direction has been their advisor, John Zettle, a fellow with a real affection for youngsters and a conservationist in his own right. Behind the scenes,

with an ever-ready helping hand, has been Fred Kindig, chairman of the nearby Berwick Kiwanis Club Agriculture and Conservation Committee.

The work that Mrs. Mary Benscoter club leader, has done in the past and faces in the future deserves its part in this story. And, cooperation of Salem Grange in providing a place for members to meet and work helps set the scene.

But, it is these young people themselves who have made the area around Berwick a better place for everything and everyone.

When you look over the accomplishments of the Salem 4-H-ers, it looks like a right fair program for the average sportsmen's club over a 10-year period. But, when you check dates, you find that March, 1958 was the starting time. For, it was in that month the club decided, as Barbara



Moskaluk put it, "It became apparent that the Salem 4-H Club had to have something new and different to offer its members."

The first thing they had to offer their members under the new program was building of bird houses and feeders. A worthy project, and had each member built a birdhouse or a feeder, it would have been a fine accomplishment. But, no. Before the month was out, the club had built 170 bird houses and 11 feeders! Later this total was "built" up to 185 houses and 15 feeders.

Advisor Zettle had the parts cut out, the boys put the pieces together and the girls painted. With this assembly line production, birdhouses were turned out wholesale. Since Berwick Kiwanis Club supplied the paint, each member received his choice of several houses.

Birds around Berwick never had it so good!

Somebody had the idea that the club should do something which would provide pleasure to others. So, last July the members pitched in to build a roadside table similar to those provided by the Department of Forests and Waters.

With hopes that somebody would make use of this fine facility, the table was placed along Route 11, the three-lane highway running between Berwick and Shickshinny. To determine whether anybody did use it, a note box was placed by the table with a paper pad asking for comments.

Before the summer was over, 1,200 persons indicated that they had enjoyed using the table. In addition to numerous notes commenting on the pleasure they received from eating under the large shade trees along the highway, grateful motorists deposited a total of \$5.85 on their own along with the notes.

Typical comments were: "Thank

**CLUB ADVISOR** John Zettle points the way for the 19 youngsters. Here he examines the forestry exhibit which took top honors in several shows including the Bloomsburg Fair.





METAL HIGHWAY SIGNS were erected by Salem 4-H'ers to help control wildlife deaths. Standing, left to right: Paul Moskaluk, Paul Reichard, Cyril Krishanda, Danny Zettle, Barbara Moskaluk, Joan Krishanda, Martha Moskaluk and Jeannette Zettle. Front row: David Seely, Keat Smith, Lloyd Bencoter, Larry Selly, Tony Krishanda and Janice Zettle.

Heaven for your table; we enjoyed it and drove miles to find it." "Thank you—after traveling toward the south for a long distance, we were so glad to make use of your fine table." Notes came from many, many states, various parts of Canada and the Panama Canal Zone.

Advisor Zettle, undoubtedly happy and proud of his beehive of boys and girls, nevertheless must have had some bad moments. Where he found spare moments and energy to keep up with the activity he started is a neat problem in time study. Kiwanian Kindig, ever eager to find projects for his committee to sponsor, had his hands full just keeping pace with these eager kids.

Although the 4-H-ers were vitally concerned with conservation, they recognized that hunters were entitled to harvest a share of nature's crop. However, they set out to make sure that both the hunters and the hunted got off on the right foot.

Ten commandments of gun safety were drawn up by Cyril Krisanda, Danny Zettle, Joan Krisanda, Janice Zettle, Tony Krisanda, Paul Reichard, Paul Moskaluk, Lloyd Bencoter, Kent Smith and David Seely. In consolidating individual contributions into a set of rules, Jeanette Zettle noted: "The real measure is that of responsibility. Will you leave your youngster in the house alone for two or three hours? Would you send him to the grocery store with a shopping list and a ten dollar bill? If the answer is "yes," he is ready for a gun, under proper supervision."

Four articles written by Mr. Zettle himself, were published by the local newspaper, the *Berwick Enterprise*, urging close cooperation between hunters and landowners during the past hunting season.

A five-mile count of road-killed wildlife was taken by members over a one month period in which it was determined that much of the kill was



needless. Consequently, the club erected four metal highway signs urging, "KEEP THE LIFE IN WILDLIFE." The slogan was originated by one of the members.

In between these major activities, the club was not coasting.

There was a trip to Ricketts Glen State Park, two shooting matches, attendance at a sportsmen's meeting, weiner roast, fly tying and fly fishing demonstration, gathering of leaves and twigs and seeds, preparation of forestry charts and a display for the annual Columbia County Fair at Bloomsburg, to mention a few.

This fair display was a typical example of how these conservation kids operate.

It took the form of a forestry project, and the exhibit was entered first in the Junior Achievement Show in August. The ten boys and girls entering took all five of the major prizes while collecting nine Blue Awards. Last fall, the exhibit was entered in the hobby show division at Blooms-

burg Fair. It again took top honors and a \$25 cash award. The same exhibit was displayed at the Farmers' Night Market in Kingston for educational purposes.

After the 4-H Annual Roundup, the wildlife exhibit was judged the most outstanding ever to be presented by a group of boys and girls. It contained 54 different kinds of wild Pennsylvania game and bird food labeled according to which species preferred it. Eight different bird houses (this was easy) built to specifications, 12 bird feeders, seven bird nests, squirrel nest, beaver cuttings, martin house, wood duck nest and hand painted conservation charts. Other charts illustrated diets of hawks and owls, road kills and suggestions for motorists and hunters, trees by seasons and a live chipmunk completed the exhibit.

As a further effort to cement relations between hunters and landowners, the club came up with an original poster to replace the staid

250 POSTERS designed to encourage respect of landowners were placed on 1500 acres of farmland last year. Cyril Krishanda wields the hammer while other club members look on. Left to right: Paul Reichard, Danny Zettle, Ken Smith, Larry Seely and Loyd Bencsoter.



and unfriendly trespass signs generally found.

This one reads: "STOP! If this land is worth hunting on, it surely is worth asking permission to do so. Help encourage good relationship between the landowner and sportsman. Be careful with his crops, fences and property. Put yourself in the place of the Farmer. Wouldn't you demand the same consideration? Don't forget to thank him for this PRIVILEGE you are enjoying. HAPPY HUNTING."

A total of 250 posters were tacked up covering 1,500 acres for the past hunting season. The friendly and practical message drew favorable comment over a wide area.

On the forestry end of this twin crusade for conservation, Fred Kindig and his Kiwanis committee were brought back into the act when the youngsters decided to go into the tree business wholesale. Fortunately, Fred Schrader is a member of Kindig's committee. Fortunately, for Schrader is one of the best informed and successful tree growers in the state. He took over as advisor for this project to ensure that the club would obtain good seed and plant it properly.

However, it was Zettle and his jumping juveniles who prepared the beds and nurtured some 152,800 seeds into trees. Members plan to use these trees for reforestation and "for our own farms some day."

Ralph Beard, assistant county agent in charge of 4-H projects, found that his time was more and more taken up in 1958 just keeping track of the activities of this little corner of Luzerne County.

It wasn't too difficult to keep track; publicity was apparently one of the club's projects. School papers and the area press were well supplied with material, not only about the club's activities, but the members carried to the public the message of conservation that they were practicing themselves. In addition, newsmen

couldn't avoid stumbling over these youngsters who scurried around everywhere there was a need for, or an offense against, wildlife.

Although conservation activity was merely set up as a project of the club, members have enjoyed it so much that it would take some restraint to stop them now. In one report, Janice Zettle noted, "Mr. Zettle has consented to continue the club all winter so we can keep on increasing our knowledge of Pennsylvania wildlife." It is probable that Mr. Zettle would have been hard put to do otherwise in face of the enthusiasm he has generated.

A chronological log of activities by the group during the past year gives a clearer picture of the total effort. For, there are many other events that contributed to the conservation education of the boys and girls. The program seems to have been limited only by the calendar, and it does not show the extra time spent by individual members on the major projects.

APRIL: 9—build bird houses; 20—shooting match; 24—build bird houses; 27—went to Red Rock Game Lands.

MAY: 5—sportsmen's meeting; 20—shooting match; 27—prepared conservation charts.

JUNE: 19—weiner roast; 29—hike at Ricketts Glen State Park.

JULY: 8—fly tying and fly fishing demonstration; 10—build roadside table; 12—placed table along highway; 18—gathered leaves; 20—gathered twigs and seeds; 25—prepared forestry charts.

AUGUST: 8—prepared forestry charts; 15—finished forestry charts; 29—built bird houses for Round-up.

SEPTEMBER: 2-3—prepared display for Round-up; 5—attended Annual Round-up; 11—weiner roast; 12—set up exhibit at Kingston Night Market; 14—trip to Red Rock Game Lands; 21—hike to Shickshinny fire tower; 29—set up exhibit at Bloomsburg Fair.



OCTOBER: 14—movie on gun safety; 19—hike to Penna. State Game Lands; 21—"Safe Hunting" program for Boy Scouts; 24—provided hunting posters to farmers of area.

NOVEMBER: 14—painted bird houses and feeders; 16—hike on Shick-shinny Mountain; 23—hike on Shick-shinny Mountain.

Before the year was out, the group had built and erected 42 more bird feeders. And, there were seven work meetings not mentioned in the table of events.

Because feeding of game in the winter is a natural for a dedicated group like the Salem club, they were all set for the troublesome times in early 1959. The treasury had well over \$100 ready to go to work. And, money was earned by the club through the sale of 125 Christmas wreaths which they made themselves.

Whether the club will continue its pace this year has not been determined. However, projects already be-

gun and completed provide a remarkable achievement for these youngsters who have cleared their own path for future fun and recreation in the out-of-doors right around home. With a minimum of 41 days and/or evenings taken up with their work in 1958, it would seem as though a rest is in order. We doubt that the club will rest on its laurels. But, in any event, many of the projects will have a lasting good effect for years to come.

As for John Zettle, the best words describing his probable approach to the future are taken from a report by one of his 4-H members.

"He has a sign hung on the wall where we meet that says better than anything else what kind of person he is. The sign reads: WE DON'T SIT AROUND AND TALK ABOUT THINGS WE ARE GOING TO DO—WE DO THEM AND TALK ABOUT THEM LATER."

Sportsmen's clubs; take notice.

BIRDHOUSE BUILDING was the first conservation project undertaken by the Club. In less than a month, they built 170 bird houses and 11 feeders.





# How To Find A Lost Dog

By Herm David

**D**OGS are cherished members of 23 million of our 40 million American households. Unfortunately, most of them manage to get lost at least once during their canine lifetimes. When they do, there is a lot of anguish in their families; the lost dog often becomes bewildered and desperate, in danger of death on the highway and a serious traffic hazard. Too often the dog is never reunited with his family and those who love him are left to wonder at what his fate might be.

Most of this anguish and distress is unnecessary. Precautionary steps

would keep most dogs from becoming lost and there are tested techniques for getting a lost dog back.

The best way to find a lost dog is not to let him get lost. Here are some precautionary steps you can take:

1. Never let a newly-acquired dog off leash until you've taught him to know you, love you, obey you and to accept your home as his own. Before you ever slip his lead you should teach him to come to you every time he is called and to stop immediately upon your command. Get a good dog training book and start 'em young.



2. Be sure his dog license tag is firmly attached to his collar. It's positive identification for any honest person who may find your dog and it automatically invokes important legal protection. If you want information about licensing requirements ask your county treasurer, police department, or the local humane association.

3. Never relinquish physical control of your dog unless he has an identification tag firmly riveted to his collar. The tag should carry your name, address and telephone number. I think it's a mistake to put a dog's name on the collar as it may be an invitation for the finder to keep the dog. It's a great comfort when your dog is missing to know the first honest person who finds him will phone you immediately. There is no better protection and no faster way to get your dog back.

4. Give serious consideration to joining one of the thousands of obedience training classes that are regularly offered across the country. If you can't find one where you live write the American Kennel Club, 221 Fourth Avenue, New York 3, New York. The training will be a lot of fun. At the weekly sessions you'll meet some fine folks who also enjoy working with their dogs and making good citizens of them. If there is no class available to you, you can train your dog right out of one of the many good obedience training books. I know; I've done it.

5. Have your veterinarian tattoo your dog with some distinctive number of your initials. It is easily and inexpensively done and it doesn't hurt the dog any more than a sudden pinch of the ear. Outside of a nose print, which would take an expert to read, I know of no other way to permanently protect your claim to ownership. If your lost dog is later found in the possession of a person who also claims ownership you might otherwise find it impossible to prove you are the true owner. Your local humane society will approve and

recommend the tattooing of your dog. License and identification tags can be lost or removed. The tattoo will stay.

6. It's likely that at least half the folks you may someday approach about your lost dog wouldn't know a beagle from an English setter—and certainly not a doberman from a black and tan coonhound. Keep a clear, full-body picture, free of any confusing background, of your dog on hand. If he is marked differently on each side, have two good pictures, each showing one side clearly.

7. Don't let your dog get into the roaming habit. And, don't keep him so confined that he'll explode at the first opportunity to run off. Dog owners should recognize their responsibility to keep their pets off the highways. Your pet could, in a flash, become the cause of human death. Dogs can not be permitted to despoil game animals and birds, poultry, livestock and crops. Pennsylvania law prescribes specific penalties for such violation.



8. Face the facts of life if you have an unsprayed female. For a very few days each year she will scheme and plan, wiggle and even fight to escape to a male. The mating urge is that strong. A male has a nose like powerful radar—especially when the time is right with any female in the area. He'll find her if he can get loose.

9. Another fact that must be faced is that we still have organized rings of dog-nappers. There is little market for sick, scrawny, street strays. Only sturdy healthy and clean dogs are in demand. If these scavengers get their hands on your dog he'll just disappear. Don't let them have an opportunity. Thefts of hunting dogs rise as the hunting season approaches.

10. Give your dog his share of attention and affection so he won't want to run off. Feed him well and regularly. Don't miss a scheduled meal.

So much for the precautions you can take. Now, what to do when your dog is gone.

Don't become panic-stricken. Use the old formula for finding a jackass. Look in places where you would go if you were a dog. A love affair? Visiting folks or other dogs he knows and likes? Gone off for a little self-hunting?

A dog will usually go in the same direction and to the same place every time he runs off. I once had an Irish setter that was so consistent in head-

ing for a particular pheasant-inhabited field that I could get into my car and beat him to the favored spot.

Scientists who've investigated the matter and the old-timers agree. Dogs can't locate the direction of sound as easily and as accurately as most humans can. If you are calling your dog with whistle or voice, use a long, steady note so he'll have a better chance of zeroing in on you. I've seen good dogs, obviously looking for their owners, become thoroughly baffled when they were getting no more help than to hear their name called out intermittently.

To achieve a penetrating range and to preserve your voice and your dignity, it's best to train your dog to respond to a whistle. Hang on to whatever whistle you use when you start this training as your dog will recognize it. The silent whistles are effective—and especially satisfactory for calling your dog in the city at night.

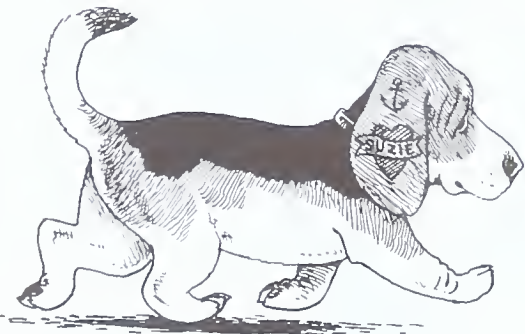
Here's one dog-hunting device that's often helpful. Kenneled and chained dogs are bound to be jealous of any dog they see running loose. Listen for the barking of dogs as a worthwhile indication of where your dog might be. Saved my bacon once when a valuable dog in my charge escaped.

If your dog is lost in a built-up area where there's a threat from street traffic, lose no time. Starting from the point at which the dog was last seen, "work outward in an expanding spiral."

This is especially good advice if there is no pattern to follow from previous escapades of the runaway. If you know the dog isn't on your block it can be a serious mistake to call him. He might come running—right in front of a car. Be careful never to call your dog across a street. And never let anyone else do it.

When you do find your dog, don't let any anger you may feel trick you into handing out a licking. The only

HAVE YOUR VETERINARIAN TATOO  
YOUR DOG WITH A DISTINCTIVE MARK.





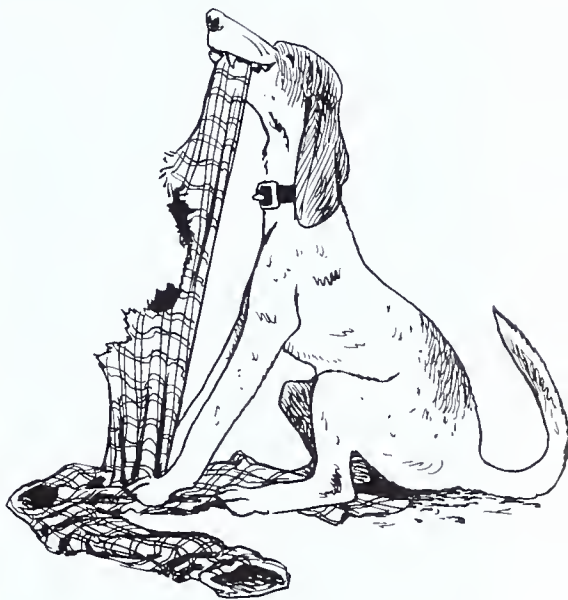
correct time to lick a dog is when you've caught him in the act and before he can forget what he's done wrong. If, upon sighting your lost dog you call him to you and he comes (he's probably already worried that he's lost you), you can teach him not to come the next time by giving him a licking.

As surely as I mention this next, some dog owner will over-play his hand and buy trouble. It doesn't work too well with hounds and you want to be mighty sure you're reading your dog's mind accurately before you take this calculated risk. Once you discover your dog is as afraid of losing you and his happy home as you are of losing him, you can let him get lost where he can't come to any real harm—and let him stay that way for long enough that he'll remember what it's like to do the worrying. A good scare before he gets too old and wise can make a homebody out of many a canine adventurer. But the trick is to plan the deal so you'll know where your pup is all the time he's "lost."

If the dog is lost at some distance from your home, while out hunting for example, don't leave the spot where you last saw him unattended unless you leave your hat or some other article of your clothing on the ground. If darkness is closing in and you can't pursue the search further, leave your hat or a coat. Return at daylight and there is a strong possibility that you'll find your dog curled up on the hat and waiting for you. If not, at least the exact spot has been marked and you can resume calling.

A word here particularly about hunting dogs getting lost. If you have one that's lost regularly and hasn't the nose and the sense to trail and find you, he isn't a hunting dog worthy of the name. Better to find him one last time and put the poor dope out of his misery or give him off as pet stock. It's amazing how

— LEAVE SOME ARTICLE OF YOUR CLOTHING ON THE GROUND WHERE YOU LAST SAW YOUR DOG—



easily the good ones can keep hunting ahead of you without constant handling and without getting lost. There's no point in having your hunting constantly soured by a canine moron.

The time of day, the nature of the area and other circumstances involved in the disappearance of your dog will affect the sequence of the steps you'll take to recover him.

Presuming you *do* have a proper identification tag on your dog, be sure to leave someone at your telephone while the search is being conducted. A finder might give up trying if he can get no answer from your phone number.

The more places you look, and the greater the amount of help you're able to enlist, the greater your chances of finding your dog. The postmen are often able to help, as are all kinds of delivery men. School children notice things adults often miss. Enlist their aid. You might even offer a donation to one of the school's

activity funds if the children are instrumental in returning your dog.

Call your local humane association, dog pound or animal rescue home and offer an accurate description of your dog. However, if your dog is wearing a license these organizations will attempt to contact you.

After an absence of several hours, or right away if a theft is suspected or if you are in strange country, solicit the help of nearby peace officers.

Small handbills carrying photographic identification and an accurate description of the dog can be lithographed quickly and widely distributed at a low cost. Where used without delay this device has many times proved an effective means of recovery.

The first thing I do when one of my dogs disappears is call all the local newspapers and place a "lost and found" ad in each of them. (You can't know which paper the finders may read.) So far I've been lucky and have always had my dog back before the papers appeared on the streets. A few times the dogs have come back

too late for me to cancel the ads—but I was happy to pay for those ads I didn't need. You will be too if your dog is returned quickly.

Ads in specialty dog magazines can be helpful if a particularly valuable and somewhat well-known dog is gone. But, with the exception of one weekly that circulates only among folks interested in bird dogs, these magazines have deadlines so far in advance of their appearance they can hardly be of help.

In some of the smaller cities time on local radio stations is so reasonably priced you may be well-advised to investigate the possibility of buying one or more spot announcements. Nothing can work faster for you.

Always offer a reward. Some folks who are *almost* honest are apt to hold any dog they may find until a reward offer appears. If none is forthcoming they may just release the dog—or even decide to keep it themselves. Miserable, but a few folks are that way.

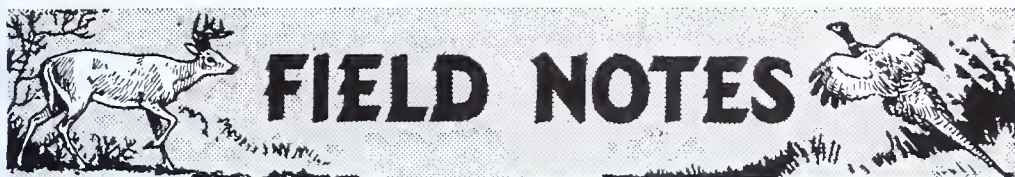
We pay our soldiers for being ready to serve in times when we have no wars. Even though you may never need their services, a small annual donation to the local humane society or animal rescue unit will keep those folks in business against the day you may sorely need their help.

Lost dogs usually have a distinctive, furtive look about them. If you see a dog trotting down the street with a broken rope or chain hanging from his collar or if you have other good reason to believe he's lost, try to coax or tempt him to you. If that doesn't work try to bluff him with a stern command. (Never chase a dog. He won't know why you are after him and even the cripples can outrun you. You may be chasing him further away from home, or worse, into the path of a car.) Try to get the lost dog home. You'll get a warm feeling from your good deed. And who knows? Someday the other fellow may be able to return your dog to you.

TOP AWARD of the Dog Writers' Association of America was presented to Herm David, left, by Frank E. Dittrich, chairman of the professional group's award committee in New York on February 8. David is a frequent contributor to *GAME NEWS*. The award was for "highest achievement for best literary merit" and was based on David's article "How To Buy A Hunting Dog" in the November issue of *Outdoor Life*.







### Tribute To A Treasurer

**CAMBRIA COUNTY**—On February 2, my wife and myself, along with other game protectors, fish wardens and their wives, had the privilege of attending a sportsmen banquet sponsored by the Nanty Glo, Vintondale, and Twin Rocks Sportsmen Clubs.

The purpose of this banquet was to honor the treasurer of Cambria County, Joseph P. Roberts, for his untiring service to the sportsmen of Cambria County during the months preceding the state-wide hunting seasons and especially during the time of the issuance of the Antlerless Deer Permits. The main speakers, the Honorable Ivan J. McKenrick, President Judge of Cambria County, Judge George W. Griffith, and Judge Alton McDonald also of Cambria County praised Mr. Roberts for this service, stating how he and his staff would open the Treasurers office at 6:00 a. m., so that the sportsmen could obtain their antlerless deer hunting licenses and not lose a day's work waiting around till the office opened up at its regular time of 9:00 a. m. Approximately 500 persons attended the banquet to pay tribute to Mr. Roberts.—District Game Protector Granville A. Miller, Barnesboro.

### Geese In The Snow

**McKEAN COUNTY**—Recently while attending a meeting I was asked if it were common to see Wild Geese in this area at this time of the year, and it certainly is not, so the man related the following story to me.

"On January 21, 1959, while working the woods cutting timber Mr. Hugh Toothman heard a strange noise, and on looking around discovered that a flock of approximately

200 Snow Geese were flying overhead and apparently confused. This was the week of the thaw and the flood. Many people were left homeless and disturbed by the flood that occurred at that time, and without doubt this flock of geese had also been disturbed and confused by the strange weather conditions which were occurring."—District Game Protector Robert H. Myers, Mt. Jewett.

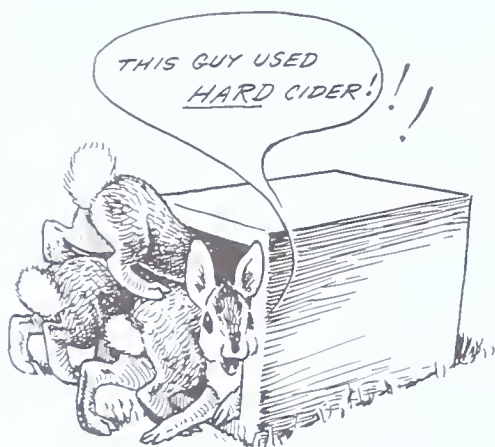
### Southern Exposure

**PERRY COUNTY**—Early in January a large black bear took advantage of the ice covered Susquehanna River in Liverpool Borough and crossed over the river into Dauphin County having to swim only a short span of open water. Probably heading South for warmer climates rather than hibernating.—District Game Protector Harold Russell, New Bloomfield.



### Heart Power

ADAMS COUNTY—The following incident was related to me and sounds almost unbelievable but it did happen on a December afternoon on a highway between Good-year and Peach Glen. Ralph Davis and his son decided to go sucker fishing. They put their fishing tackle in the car, the old hound dog on the back seat and a bucket for bait on the floor. Their fishing trip was suddenly brought to an end when a large doe crashed through the rear side window of the car. The deer was caught in the middle of its body by the broken glass, the front half in the car. In the struggle to release itself, with its hoofs, it beat up the old hound dog and gave the man a black eye. It finally got loose and ran about 25 yards before it fell to the ground dead. Later he found that the deer had left its heart and  $\frac{1}{2}$ " of blood in the bait bucket. Its heart had been severed by the jagged edges of the broken window. The deer ran 25 yards without a heart.—District Game Protector John Spahr, Pine Grove Furnace.



### Sweet Cider

ALLEGHENY COUNTY—Al Kizinia and Bob McGinnis, two of my rabbit trappers tried out a new approach for catching rabbits this season. The men sprayed the inside of their traps with apple cider. The first morning they had twenty-two rabbits in their traps. It seems the cider smell must have attracted the rabbits to the traps. Some of the other trappers have tried it, and it really brings results.—District Game Protector J. W. Way, Coraopolis.

### Five And Thirty Blackbirds

GREENE COUNTY—On December 27, 1958, Mr. Ralph Bell of Jefferson, Penna. made a survey of birds in Greene County. Of special interest to me was that there were 35 species of birds in the area counted that day. Also of interest was that a count of crows on one flyway totaled 2,537. There were three such flyways in Greene County. Many of the crows that winter in the County come from New York State and Eastern Canada. Two crows that were banded in Greene County have been shot in the summer in Quebec by French Canadians. This proves that the crow is quite a gadabout.—District Game Protector Richard L. Graham, Carmichaels.

THAT'S A  
LIKELY STORY



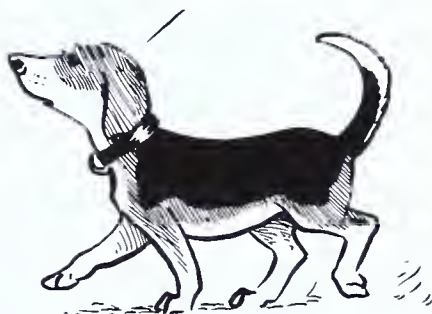


### Great Dane, Dad

LEHIGH COUNTY—I received a call from the State Police that a deer had been hit by a truck on Route 22 Thruway. I drove to the spot, stopped and when I went to pick up the deer, found much to my surprise, that the “deer,” was a large Great Dane, fawn colored, which did indeed look much like a deer as it lay beside the road. From the tag on the dog's collar, I was able to locate the owner.—District Game Protector William Moyer, Allentown.

RABBITS?

I COULDN'T CARE LESS



### Fox Hound

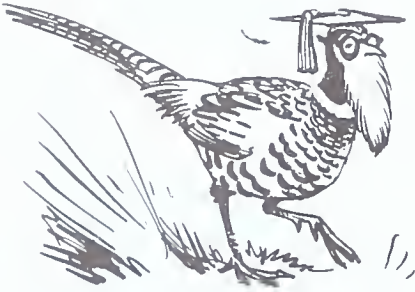
CLARION COUNTY—On January 27th while on patrol I heard a beagle dog running and heard shooting. Thinking someone didn't know hunting season was over I went toward the shooting. When I located this man he had one red fox and one gray fox. He stated that he had killed eight fox with this beagle so far this year.—District Game Protector William D. Denton, Clarion.

### The Day That The Rains Came Down

FAYETTE COUNTY—January rains and melting snows caused many millions of dollars in damage to life and property throughout the Commonwealth. I am just wondering how many other game protectors in the Commonwealth can add additional dollars in loss to hunters through floods in the same period. On January 3, 1959, Deputy Charles R. Bloom of Dawson informed me he had to dispose of an eight point buck. The details, “caught in an ice jam about seventy yards from shore more ice piling up and water rising steadily. All attempts to retrieve the buck were futile.” On January 20, 1959, Clyde Cosner of Dunbar, a foreman on the Western Maryland RR reported to me a doe was caught in an ice jam about 50 yards from shore with water raising rapidly. The incident was about two miles from the nearest point one could gain by auto. I was told if a large tree was felled to fall on the ice jam, one could rescue the deer. In the same breath the informant agreed this would be too risky to someone's life. The doe is considered lost. Both of these tragedies to wildlife occurred in the Youghiogheny River in my district.—District Game Protector A. J. Ziros, Connellsville.

### Big Hearted Feed

SUSQUEHANNA COUNTY—Each winter as food conditions become more difficult, sportsmen and the Game Commission feed many tons of grain to wildlife to supplement what little can be found on the forest floor. At this time even non-hunters take an active interest and numerous outdoor cafeterias are established throughout the country side. But every now and then a special example of generosity is brought to our attention. One such example is the gift of 200 bags of oat screenings donated by Audley Lott, feed mill owner of South Montrose. The seeds found in these screenings is utilized primarily by song and game birds and but for Mr. Lott's thoughtfulness the birds of Susquehanna County would be hungrier.—District Game Protector Donald G. Day, Susquehanna.



### Old Ringnecks Almost Never Die

**LANCASTER COUNTY**—During the month of November this past hunting season, Dr. Philip Jacobus, Lancaster R. D. #5, shot a cock bird wearing a band and released by the Mill Creek Sportsmen's Club of Lancaster County. The bird was released in 1954. To the best of my knowledge, this is a record for banded birds in this county. The bird must have been mighty clever to survive the gunning pressure in this county.—District Game Protector Wallace Woodring, Ephrata.

### Skater's Waltz

**HUNTINGDON COUNTY**—During the first week of the 1958 antlered deer season a party of hunters from the Raystown Branch area were driving for deer on a side ridge of the Terrace Mountain along the Raystown River. The river had frozen lightly with a rough surface from the blustery wind and the hunting party decided it would be unnecessary to place flankers along same. During one drive approximately a dozen deer were observed descending the side of the range to the rivers bank and crossing to safety on the opposite side. The irony of the incident is that the deer crossed in single file with adequate space between each on the thin, creaking ice. Had those deer, faced with life or death, been possessed with the mind of man they would probably have rushed on the thin ice, only to be lost to old man river.—District Game Protector Richard Furry, Huntingdon.

### Blue Snow

**CRAWFORD COUNTY**—For the past two seasons a snow goose and a blue goose have been making unusual appearances at Pymatuning Refuge. In the Spring of 1957 these two birds were in immature plumage and drew our attention because of their tameness and willingness to feed with the captive Canada geese; also because they did not migrate on North until about June 1. In the fall of 1957 they appeared here again in early October and stayed until late November. Again in the Spring of 1958 they returned in late February and became quite tame and stayed until late June. They appeared at Pymatuning again in October of 1958. Observations indicated that they were a mated pair; at least, they always kept in very close company on all occasions. They disappeared from Pymatuning sometime in late November. However, in January the Snow goose showed up here again. We are wondering if the absence of the Blue Goose means it has had a fatal accident during the trip South or what might have prompted the migration of the Snow this early in the season.—District Game Protector Raymond M. Sickles, Linesville.

### Waterfowl-ed Fox

**ERIE COUNTY**—Deputy Ted Janosik, of Waterford R. D., reported that he saw several wild ducks in a small pool of open water on S.G.L. #109. The snow around the pool was well padded down with fox tracks. The tracks told the story that Reynard wanted a duck dinner very badly and had spent many hours watching the ducks and perhaps waiting for one to get a little too close to the edge of the ice. His tracks indicated, also, that he found the icy water a barrier to a good meal for there was no sign to indicate that a duck had been killed in the area.—District Game Protector Elmer Simpson, Union City.



### Full House

**CENTRE COUNTY**—Recently a young rabbit trapper, under supervision of Acting Game Protector Neal, came to my brother's home in Bellwood with a box trap that was too full. It contained a house cat and a rabbit, and as he put it "I need some help."

The trap was placed on end, door opened, and the rabbit was found on top of the cat. The rabbit was placed in the boy's container, and the trap was opened and placed on the ground. The cat took off "like a scared rabbit." I have seen traps robbed by cats and dogs, but have never heard of one like this—especially with the rabbit in good shape.—District Game Protector Charles M. Laird, Pleasant Gap.

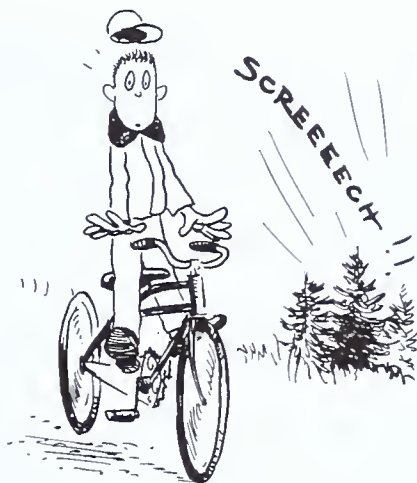
### Rugged Fool

**LANCASTER COUNTY**—On the third day of buck season Deputy Game Protector Flory—checked on a deer hunter at No. 156 State Game Lands in Lancaster County who apparently was "tired of living." In sub-freezing temperature and with snow falling at the time, this hunter was wearing a tan colored hunting coat and a natural colored *straw cap* such as is worn in the summer months. When cautioned by Deputy Flory concerning the lack of protective coloring in his attire, the hunter replied, that any person who shoots at him, "will get one back in return." Deputy Flory then reminded him that perhaps he wouldn't be able to return the fire, whereupon this "rugged" hunter left without any further retort.—District Game Protector J. M. Haverstick, Lancaster.

### Call of The Wild

**SULLIVAN COUNTY**—On Saturday February 1, 1959 a friend and I were attempting to call in fox with one of the newly developed electronic

callers. The device plays a recording of the death "screams" of a Cottontail rabbit. At the one particular stop another friend decided he would stay in the automobile to get warm for a change and in making this decision he was about to witness a quite amusing experience. Later, he related that after watching us proceed down a sloping field and disappear into a clump of scrub Hemlocks, the recording was started. He then stated that a young country lad, perhaps ten to twelve years old came sneaking down through the open field and after approaching a little closer to the commotion, began "creeping" on all fours, and still later after evidently thinking he had pin-pointed the noise, jumped to his feet and came running at a fast pace to our "stand." What he expected to find or see is a mystery, but, there certainly must have been some bravery connected with the "stalking" of the screaming electronic device. The lad after spotting the friend and myself, very "sheepishly" turned and walked back to the dirt country road and picked up his bicycle from behind a small knoll where he had hidden it. Still staring and wondering, he rode past us down the lane.—District Game Protector Paul Asper, Laporte.





## Find Them First

By Frank Stout

**A**T 200, 250, or 300 yards what a better live target is there than a woodchuck? The little farmer's pest has many of the qualities that put excitement into big game hunting—and to me, at least, a few more. Roughly, he's about four or five inches of target. He's as razor-sharp alert as any animal hunted by man—and perhaps sharper in instinct than

most. In some states he offers hunting for six months or more of the year. Altogether, he's great game and an exacting test of a rifleman's skill and patience.

But if you want to hunt him, first you must find the woodchuck. So, how do you go about it if you've never hunted them before?

The time to start is in the early

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Spring in the eastern United States, as soon as the snow has left the ground. Assuming you have access to plenty of farm land, see your farmer friends first. If there are chucks on their property, they'll tell you and point out at least the approximate locations.

Then you start tramping those soggy meadows looking for chuck dens. Check along stonewalls, woodland borders and the edges of fields. Carefully spot meadow hillsides where chucks like to bore in at angles to the slope. Look also around outcroppings of rock. You can't mistake the holes at this time of year when grass is matted flat. Make mental notes of where the chuck dens are for future reference.

Now, what about this character, the woodchuck, known to scientists as "*Marmota monax monax*"? He comes out of a deep-sleep hibernation in late February or early March and almost immediately begins the mating

process. The young are born in May, from four to six in a litter, naked and blind. The adult chuck's hair is often matted and rubbed at this early period of the year. The animal usually feeds sparingly at first—mainly on what little green grass can be found.

Most chuck hunters spare the animal during the early Spring, preferring to wait until the young are out of the dens and foraging for themselves. Indiscriminate, early-season shooting leaves the young to starve to death or destroys the mother about to bear young. No one wants to see the woodchuck extinct.

By early June, the young have grown enough to venture out on feeding sprees with the mother. By mid-August, the striplings are on their own, digging their own holes and matching their forebears in destructive forays through clover, bean rows and other succulent greens.

By early June, the chuck has be-

**CHUCK HUNTERS** Gene Coleman, left, Tommy Price and Berkeley Ide "spot" fields for early targets. The time to start is early spring as soon as the snow has left the ground.



come a prime target. Field grasses, hay and clover have grown up, giving the chuck partial concealment. But, remember, you've already spotted the tentative locations of the chuck's dens. Now to shoot.

Return to those fields you scouted in the early Spring. If you have binoculars, sweep your search along the edges of stonewalls, the rims of wooded fields and hillsides. Look carefully for tufted grass which is greener than all the rest. This may mark the aerated soil around a chuck den. Hold your gaze on these areas for several minutes. Be patient. If the chuck is down on all fours feeding, he may not be immediately visible. When the wary chuck pops up for a characteristic look around, you'll spot him. They seem to come from nowhere. One moment there's nothing but grass. In the next moment, there sits the chuck on his haunches. Once he's up on his haunches, that's the time for you to "freeze." Any elaborate movement on your part will send him zooming down his hole in a blur.

If the chuck is not alarmed, however, and drops down on all fours out of sight to feed again, wait him out. Get your rifle into a comfortable position immediately. If a prone position is possible, wriggle into it quickly. Often, however, a prone

position won't work because of high grass or intervening obstacles. Next best bet is a firm sitting position which gives elevation over the high grass and rolls in the landscape.

When the chuck is feeding on all fours, he stays down about eight to 15 seconds. He may move a few feet in any direction during this feeding. Then he pops up again for a three or four-second look around. If you're stalking him for a better shooting position, take no more than three or four steps while he's down feeding. Bend into a stooping position as you stalk to minimize your outline. Be prepared to "freeze" when the chuck pops up again.

The eastern woodchuck, according to game biologists, spends about three hours of each day out of his den on feeding forays, usually in the early morning and evening. The chuck, like most animals, is color blind but his keen eyes are exceptionally acute to movement. Usually, the chuck feeds no more than 25 yards from an escape hole. If you miss on your first shot, your chances of belting him on the run through a bouncing scope sight are slim indeed. Sometimes, however, if you whistle sharply when the chuck is running, he'll stop, and you may have the chance for a snap shot. I've seen this done many times. If you are in an area you know to be populated by chucks but none are visible, a sharp, three-noted whistle sometimes will bring them up for a look around. The whistle is the alarm call from which the chuck gets his nickname, "whistlepig." Why he pops up for an alarm whistle is just another of the chuck's many contradictions. There are other such contradictions:

For instance, if you ever find a field with three or four chucks up at once and you pick out a target, and fire but once, all the others will be brown blurs going down their escape holes. Another time you shoot at a lone chuck in a field and two or three will

PATCH OF SNOW shows at left of this chuck hole "spotted" easily in early spring and marked in "memory book" for hunting later in the year.







CHUCK COUNTRY in northeastern Pennsylvania looks like this in April. This is the time to spot chuck dens with grass flat and a few patches of snow still lingering in the fields.

bob up from nowhere for a silly look around.

Don't neglect to glass the tops of stonewalls. When the weather is sunny and pleasant, chucks often curl up on the flat tops of stonewalls, apparently enjoying the warming effect of the sun. But know your shot in cases like this. Such shots toward the tops of stonewalls offers only a "guess-work" background. Don't guess.

There are few—if any—game animals which offer the shooter a wider choice of cartridges. Everything from the .22 rimfire to the 30-06 have been used successfully on the woodchuck. The .22 rimfire has too many limitations, however, for my liking although in the hands of a skilled stalker and steady shot, it is very effective. The .22 rimfire's effective range on chucks at the very most is 50 yards. And this requires some pretty fancy stalking. Even at 50 yards, the .22 rimfire sometimes fails. The fat-encrusted chuck is tough and

able to soak up a lot of lead before expiring. There also is too much temptation to toss off shots at ranges of 75 and 100 yards with the .22 rimfire with the danger of many wounded animals that crawl into their holes to await a slow and painful death.

The center fire 22s, from the Hornet on up, the 218 Bee, the 219 Zipper, the 257 Roberts, the 240 Cobra, the 220 Swift all are excellent chuck weapons in the hands of a rifleman who has carefully sighted in his gun from a bench rest.

Principal objections to the heavier calibers are their loud reports which disturb farmers. Mainly, the answer to the question of what gun you use, is the usual one—the gun that suits you best; the one with which you can hit 'em. And that's the point of chuck hunting.

But you won't hit 'em unless you find 'em first. So, spot 'em in the Spring and hunt 'em in the Summer.

# The Most Fragile Hibernators



By Larry J. Kopp

(Photos by the Author)

**I**F you think that bears and woodchucks are the only creatures of Penn's Woods which hibernate, you don't know all you should about the bush country!

Although considered as our most fragile insects, at least seven butterflies are known to hibernate in Penn-

COMPTON TORTOISE SHELL is seldom observed because, when resting, it resembles a dead leaf. Long known to remain in the north over winter, a relatively small number survive the intense cold. This butterfly is famous for being numerous one season and almost extinct the next.



sylvania. In order to avoid confusion, I should explain that this refers to adults. Actually, insofar as science is concerned, all butterflies hibernate as pupae or partly-grown larvae.

Probably the very first butterfly which fascinated early students of lepidoptera because of its tendency to hibernate was the mourning cloak. Indeed, the species became world-famous, but has lost some of its fame due to the discovery of other species which also hibernate.

In Great Britain, where the butterfly is better known as the Camberwell Beauty, the mourning cloak is relatively rare and looked upon as a prize catch by British collectors.

In our own Commonwealth, as in most parts of the United States, the species is fairly common. Often observed on the wing while the early-Spring woods is still covered with snow, hearty outdoorsmen have long recognized the famous mourning cloak is the first sure sign of Spring.

The remaining six species illustrated here can be seen out of hibernation in late-March and early-April.





**MOURNING CLOAK** is known in England as the Camberwell Beauty. For years it has been recognized as the only butterfly which hibernates in the north. Adults emerge from their pupae during late fall and shortly thereafter seek protection from the weather under loose tree bark. In early spring, Mourning Cloaks out of hibernation can be seen along woodland roads.

**HOP MERCHANT** is so named because its larvae feed on hop. Unlike the tortoise shell, however, this butterfly often prefers to hibernate in brushy areas along streams. It does not come out of hibernation quite as early as the Mourning Cloak but it does survive northern winters in larger numbers than formerly.

**RED ADMIRAL** has gained fame through the years because of its tendency to hibernate altho not many specimens survive the winters. This butterfly seeks refuge in knot holes and under loose tree bark. In former years it was a pleasant sight to see one specimen on warm, spring days; now it is almost commonplace to see a half dozen or more.





AMERICAN PAINTED LADY is almost as strongly migratory as the familiar Monarch butterfly. But even such a forceful instinct to migrate south doesn't prevent many specimens from hibernating in the north. In 1951 one of America's leading experts on butterflies reported that both adults and pupae of this species hibernated. Prior to this, many people thought that only the pupa could withstand our old-fashioned winters.



RED SPOTTED PURPLE butterfly is probably one of the best examples which suggest that our winters are getting warmer. Until a few years ago, experts agreed that only the part-grown larva of this butterfly hibernated. Today it isn't at all surprising to see adult specimens as early as the first week in April. The new brood for the season does not emerge until mid-May or later. All of which suggest that now the red spotted purple butterfly, too, has decided that it can survive the northern winters.

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### Teach Gun and Hunter Safety Now

Boy Scout, school and athletic league administrators searching for an interesting and beneficial project during the summer months have one ready-made for their participation. Youngsters may be taught proper gun handling, range firing and a measure of hunting safety.

In past the gun handling and safe hunting project has largely waited until September or October, when the urgency of the approaching small game season brought many requests for firearms instruction. Unfortunately that is the period when Game Protectors, who would like to help, are particularly busy with pre-season duties.

The Game Commission plan has been to qualify school people and those associated with youth organizations so that they could instruct large numbers of youngsters in the firearms course throughout the year. In order to do the job better all Pennsylvania Game Protectors qualified, last summer, to teach the procedures in accordance with the program of the National Rifle Association. These officers taught over 1,000 Deputy Game Protectors, who then were certified as instructors. The Commission officers qualified many other persons during 1958.

At least one N.R.A. instructor will be available in almost any Pennsylvania community. In many instances the use of an outdoor range may be secured for practice firing. Now is an excellent time to teach proper firearms handling and shooting, thus preventing accidents that occur only because youngsters are untrained.





# Game--A Byproduct of the Watershed

By Harvey R. Frantz

**S**CATTERED throughout the Commonwealth are approximately 112 forested watersheds containing about 275,000 acres. Averaging in size about 2,500 acres, these watersheds are owned by municipalities, authorities and private water companies. These are in addition to watersheds on state and federal lands.

Some of these watersheds are open to the public, others have restricted use while still others are entirely closed. Usually the larger the watershed the more apt it is to be open. Not too many years ago the thinking was that a watershed should not be defiled by any one, not even a forester. Let the trees grow into mature giants, but never harvest a twig; let the deer herds multiply and destroy the young reproduction, but never shoot a deer.

However, due to research and experiments by foresters and wildlife specialists, the management of watersheds is now taking into consideration the production of timber and wildlife in addition to water supply.

In watersheds that were scientifically thinned and harvested, the water yield jumped an average of 27%. At the same time the habitat for wildlife was immeasurably increased by the resulting brush piles, accelerated growth of the remaining vegetation and the introduction of additional reproduction by sprouts and seedlings.

Evergreen trees hold tons of snow in their branches and when exposed to the sun and wind, it evaporates quickly. If some of these larger trees are removed snow reaches the ground where it is shaded by the surrounding trees and there is less loss by evaporation. On the other hand, in the spring a larch will use 146 gallons of water for each pound of dry matter produced. A medium sized elm on a clear, hot, dry, day will use 1,875 gallons of water to maintain itself. And naturally, the more water the trees use, the less there is for runoff into the reservoir.

After the foresters began to practice their profession on the water-

sheds it was almost a natural that game management would follow. Like trees, too many deer for a given area results in slow and scrubby growth for the animals and, at the same time, the destruction of forest reproduction on the watershed by over browsing.

The City of Bethlehem's 10,000 acre Wild Creek watershed in Carbon and Monroe counties is a good example of the combination of water, timber and game production. Naturally water supply is given first consideration and primary protection. The two reservoirs, one 4 billion and the other 6 billion gallons capacity, are surrounded by a 7-foot fence which encloses about 1,000 acres. Even though this area is closed to trespassing, it does serve as a State Game refuge and a source of game supply for the rest of the watershed. This leaves the remaining 9,000 acres open to the sportsmen. All the City asks is that the hunters be careful with fire and pollution.

Over 22 miles of fire lanes and trails crisscross the watershed making

it convenient to reach the furthest corner—on foot. The lanes and trails are barricaded with cables to prevent vehicular traffic although when a bear or whitetail is taken, arrangements can usually be made to have the animal hauled out to the main road by car. By limiting the roads to foot traffic it lowers the possibility of forest fires, dumping of trash, tearing up the roads during wet weather, discourages the lazy or meat hunters, and gives the game an even break.

The firelanes were constructed 20 to 30 feet wide with the idea of planting both sides to wildlife shrubs. This will give a continuous food and cover border, especially for small game, throughout the watershed. Already grouse have shown a marked preference for these wide lanes and generally can be found along the edges. The lanes themselves are a barometer of the game population, recording wildlife movement by the tracks in the dust, mud, or snow depending on the season.

Every year a number of bear are

**ONLY AREA CLOSED TO HUNTING** is that immediately surrounding the reservoirs. It is used, however, as a state game propagation area. About 1,000 acres of the watershed are closed; the other 9,000 acres are open to law-abiding and respectful sportsmen.







**FIRELANES ARE BAROMETERS OF WILDLIFE POPULATION**, recording wildlife movement by the tracks in the dust, mud or snow depending on the season. They are constructed 20 to 30 feet wide and are being planted on both sides to wildlife shrubs.

taken out of the Wild Creek watershed. The first day of the 1957 season there were 3; last year the first day saw 4 killed. The deer harvest is especially good, both during the bow and arrow season and the regular season. For small game there are rabbits in the numerous conifer plantations and squirrels, grouse and wild turkey in the hardwood areas. Trappers move in after hunting season and 'coon and fox are taken on the trap lines that are usually set along the fire lanes.

Selective logging is the harvesting of the old or mature trees which are scattered throughout the watershed. Their removal results in small isolated openings in the forest canopy which are soon taken over by young trees and shrubs. This is an ideal habitat for game and if the balance is right, there is sufficient food for game as well as enough reproduction to fill the opening with potential timber. If there are too many deer the reproduction suffers and the opening in the forest could remain permanent. This is not desirable for a producing watershed.

If all watersheds in the state would be open to hunting it would be a sizeable addition to the state game lands and other public hunting areas. In some instances the watershed may be so located that high-powered rifles would be dangerous. But in a case like this the bow and arrow hunters could take over. Many of these watersheds would be ideal just for archers. Other watersheds that might be too small for either group could be used as wildlife refuges to supply the surrounding countryside. The Hellertown watershed is a good example of this use.

With the diminishing of open hunting lands by the construction of homes and roads and the purchase by private clubs, the average sportsmen will have to depend more and more on public lands for his hunting. As the majority of the watersheds are publicly owned and are now supplying the citizen-hunter with his water, there is no reason why most of them couldn't furnish him with some hunting as well.



# CONSERVATION NEWS

## PENNSYLVANIA'S TIMBER RESOURCES DESCRIBED IN FOREST SERVICE PUBLICATION

Fifteen million acres of forest land! That's the extent of "Penn's Woods" today—much less than three centuries ago when William Penn received the land from Charles II of England. Still, even now, it's a figure that represents more than half of Pennsylvania's land area.

This is but one fact brought out in a 46-page, illustrated booklet, "The Timber Resources of Pennsylvania." The survey was made and published by the Forest Service's Northeastern Forest Experiment Station in cooperation with the Pennsylvania Department of Forests and Waters.

The report includes data on area and condition of Pennsylvania's

forest land, volume and quality of standing timber, and estimates of timber growth and mortality, as well as the amount cut for forest products.

Over the past several years, eight regional reports were published for the various geographical sections of Pennsylvania. Now, the statewide summary brings this sectional material together and adjusts most of it to a common date.

The same forest survey provided part of the data for the massive, 700-page "Timber Resources in America's Future," published by the Forest Service some months ago.

Pennsylvania's most heavily wooded counties, according to survey findings, are those in the Allegheny

**FOURTH ANNUAL PENNSYLVANIA RECREATION-SPORTSMEN'S SHOW** staged at the Farm Show Building in Harrisburg March 16-21 attracted thousands of spectators. Highlight of the educational exhibits was this Outdoor Education Project for sixth grade students from three Pennsylvania public schools.





and North-Central sections, where forests covers 75 percent of the land.

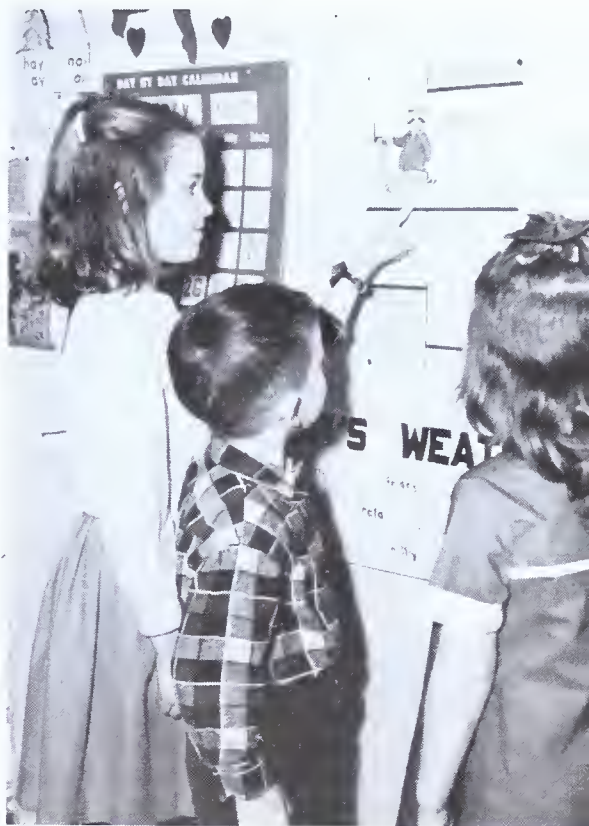
The timber resources report brings out many other facts about "Penn's Woods." For example:

One-fourth of the woodlands support sawtimber stands—that is, stands containing 1,500 or more board feet per acre.

Hardwood types predominate, covering 95 percent of the commercial forest land. Commonest is red oak accounting for one-fifth of the hardwood volume. Other common hardwoods include chestnut oak, black cherry, sugar maple, white oak, red maple, beech, and yellow birch.

The state's growing stock amounts to 12 billion cubic feet; the wood volume suitable for pulpwood totals 149 million cords.

Currently in Pennsylvania more timber is grown than is cut. But the biggest and best sawtimber trees are being cut faster than they are being replaced.



**GOOD OUTDOOR MANNERS** project of the Pennsylvania Forestry Association drew entries from one of every 10 school children and reached one of 8 schools. More than 2,000 different names were submitted in the "Name The Raccoon" contest, which ended March 15th. Final winners will be announced in May. Top: Margie Samules, Bruce McDermott and Sally Miller of Central School, Springfield (Delaware County) examine the poster announcing the contest. Bottom: The Junior Activity Group of the Drexelbrook Garden Club helped in the pre-judging of contest entries. Left to right: Pat Lee, Betty Damman, Roberta Klick, Carol Gray, Nancy Lee. Standing: Mrs. John P. Lee, President of the Drexelbrook Garden Club.



## Izaak Walton League Plans Outdoor Recreation Study; Philadelphia Host to 37th Annual Convention This Month

The Izaak Walton League has announced that it will dedicate its entire 37th Annual Convention to be held at Philadelphia, April 21-25, to discovering ways in which the national conservation organization can aid the Outdoor Recreation Resources Review Commission in its three year study of America's outdoor recreation needs.

Theme of the '59 convention, to be held at the Bellevue Stratford Hotel, is "30 Months to a Better Outdoor America." Thirty months is the time remaining for the ORRR Commission to complete its study, and the time left to the League to meet its pledge to help make the study successful. The theme address will be given by Laurance S. Rockefeller, newly appointed Chairman of the ORRR Commission.

A convention highlight will be a League-sponsored Youth Conservation Conference. Junior and senior high school students from throughout the nation—brought to the convention by League chapters and divisions—will hold "brainstorm" sessions aimed at finding ways that youth may further conservation. They will report their findings to the League convention. Youth will attend conservation sessions of the convention and will hold their conference during business sessions.

Features of the League convention include:

League leaders' conservation preview Tuesday, April 21, including remarks from Ross Leffler, Asst. Sec. of the Interior for Fish and Wildlife; Arthur W. Greeley, Asst. Chief Forester, U. S. Forest Service; and Gordon McCallum, Chief, Water Supply and Water Pollution Control Section, U. S. Public Health Service.

A day-long symposium Thursday, April 23, on outdoor recreation opportunities on private lands featuring reports on: private lands and America's outdoor recreation tradition; landowners' problems with outdoor recreation; management of recreation resources on private lands by public agencies; and public responsibility in outdoor recreation on private lands. A report on the effect of the League's 1958 "Hunt America Time" program will be given.

League delegates in three separate workshops Friday, April 24, will resolve ways in which they can contribute to the landowner-sportsman aspect of the ORRR Commission study. They will report their findings to the convention.

The League's position on national conservation issues will be presented in resolutions adopted at the close of the convention.

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### HIDING HERDS

If you didn't spot a deer this season, don't jump to conclusions. The buck, it is true, is an elusive shadow. Wildlife Review reports on the Michigan experiment in which 39 deer were fenced into a square mile area of hardwood forests, conifer swamps and open pine barrens. On a clear day after a light snow had made the ground ideal for tracking, six hunters entered the area. It took them four days (15½ man-days of hunting) to even see a buck. Although most of the animals had never been fired at and hunters over a three-year period were allowed to stalk, trail, stand or organize drives, it required an average of 14 hours to shoot a deer in an any-sex season, and 51 hours to take a buck.



## Commission Releases Snowshoe Rabbits

The Game Commission is continuing its research study to determine the possibility of re-establishing snowshoe rabbits (varying hares) in areas which appear suitable but are too far from localities where the animals are present for natural repopulation to occur.

On January 27th, 474 of the snowshoes, live trapped in New Brunswick, arrived in Pennsylvania by truck and were liberated in the counties of Jefferson, Warren, Cambria, Somerset, Cameron, Elk, and Bedford.

The Game Commission stresses the fact this is not a restocking operation. The intent is to bring back the hares where favorable habitat now exists but where none of the animals are presently found.

Studies of the results of similar releases made by the Commission in the last four years indicate that the snowshoe rabbits have been re-established in several areas.



## Thompson Receives Commission Appointment

The State Senate recently confirmed the appointment of James A. Thompson of R. D. 1 Wexford, Allegheny County, as a member of the Pennsylvania Game Commission.

Thompson will serve "until the third Tuesday of January 1967, and until his successor shall have been appointed and qualified," the communication from the Governor's office read.

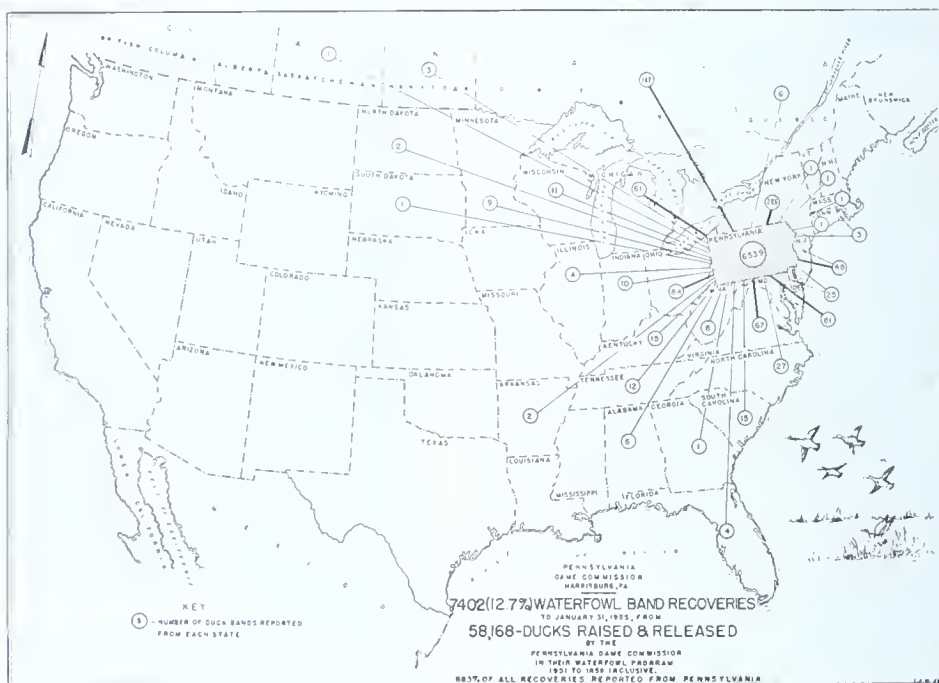
Thompson has been a Commission member since June 28, 1957, completing the unexpired term of Ross L. Leffler who resigned from the Commission in January of 1957 to accept the position of Assistant Secretary of the U. S. Department of Interior.

## Industry Gives Scouts Booklet on Conservation

America's forest industries—continuing their close relationship with the nation's 5 million Boy Scouts—have published and turned over to Boy Scout conservation leaders 75,000 copies of a new booklet, "Patrol and Troop Forestry Activities."

The 24-page booklet, designed and prepared by American Forest Products Industries, Inc., Washington, D. C., will be used by the nation's more than 70,000 Scoutmasters in the Boy Scout Conservation Program.

This is the third nationwide project for Boy Scouts by the forest industries. Earlier, a Cub Scout kit which stressed tree farming—the growing of trees as a crop on taxpaying lands—was used by Cub Packs.



## Map Shows Dispersal of Released Ducks

The Game Commission has prepared a duck map which at first glance appears to show a sunburst pattern. Lines radiate every which way from Pennsylvania to indicate where waterfowl released by the Commission in the last 8 years were reported taken by hunters. The map may be obtained without cost from the Commission's Division of Propagation.

Beginning in 1951 and continuing into the early summer of 1958 the wildlife agency reared, banded and liberated 58,168 mallard ducks in the Commonwealth to improve waterfowl hunting in Pennsylvania. As of January 31, 1959 band recoveries since the start of the program numbered 7,402, 12.7% of the total number of "braceleted" ducks released. Though 88.3% of all the bands reported came from Pennsylvania, many of the remaining recoveries were from distant points.

Canadian provinces accounted for 157. The largest number of reports from our neighbor to the north, 147, came from the Province of Ontario.

Quebec registered 6 and Manitoba 3. A really venturesome Pennsylvania-liberated duck provided tasty eating for people 'way out in Saskatchewan. The map shows a sprinkling of the waterfowl taken in all the New England States except Maine. Two of the ducks ended their travels in North Dakota, one in South Dakota. To the southwest of Pennsylvania two were bagged in Arkansas, 6 in Alabama. The farthest known flight south from the Keystone State was made by 4 ducks which ended their wanderings in Florida. The marked waterfowl were reported bagged in the 4 provinces mentioned and 26 states other than Pennsylvania.

The map graphically shows that some of these ducks simply yielded to a natural urge to travel soon after they reached maturity. It also indicates that most of the released waterfowl remained in the Commonwealth long enough to provide sport for hunters here. Studies have also shown that many of the birds that escaped the first waterfowl season and made a successful fall migration south returned to the locality where they were set free, there to produce more of their kind.



## FISH COMMISSION RELEASES NEW SERIES OF WATERS-HIGHWAY MAPS FOR SPORTSMEN

The first fourteen of a new series of Waters-Highway Maps to be produced by the Pennsylvania Fish Commission are now available to the public, according to an announcement by William Voigt, Jr., executive director.

When completed, the series will consist of 46 separate maps, mostly of single counties, showing in detail all streams and lakes, the highways system down to township roads, and public-owned lands.

Voigt disclosed that the project has been underway for over a year, and probably will not be completed until late summer, this year. He also stated that the production of these maps is in answer to requests for "fishermen's maps," the most common request received by the Commission.

Of those presently available, three are two-county maps—Cameron-Elk, Carbon-Monroe and Lehigh-Northampton. The remaining eleven are of single counties as follows: Bedford, Clinton, Crawford, Erie, Lancaster, Lycoming, Pike, Somerset, Wayne, Westmoreland and York. In conformance with state regulations which provide that no publication costing more than 10 cents per copy may be distributed free, the maps will be sold. The two-county maps cost 50 cents, and the single county maps 35 cents. Checks and money orders must be made out to the Pennsylvania Fish Commission. Cash will be remitted at the sender's risk, and stamps are not acceptable.

Voigt's description of the details

shown on the map is as follows: "They are drawn on a scale of two miles to the inch, in three colors. Shown in blue are all the streams, lakes and swamps in the respective counties, with those waters which lend themselves to hook and line fishing named. Also keyed in blue as to type of use to which they are put—public fishing, public access or hatcheries—are all Fish Commission owned or leased areas.

"The highways system, with state and U. S. routes numbered, is in brown, as are bridges, town names and county and grid lines. A sufficient number of towns have been named to guide the map user. The relative sizes of the towns are indicated by the sizes of letters used to name them.

"In green, and individually keyed, are all areas under the jurisdiction of state and federal agencies. These include state game lands, state parks and forests, national forests and Fish Commission holdings."

Voigt said the fourteen maps of the seventeen counties named are available now from any of the Commission's regional offices or its main office in Harrisburg. He advised that fishermen order their maps from the regional office nearest them to avoid delay. The regional offices are in Conneautville, Crawford county; Lock Haven, Clinton county; Honesdale, Wayne county; Somerset, Somerset county; Huntingdon, Huntingdon county, and Hellam, York county.





## Grouse Gab 1958

By Glenn L. Bowers

Chief, Division of Research

“THE Bottom Dropped Out” of the grouse population in some midwestern States in 1958. There have been numerous complaints and grumblings from hunters in some areas of Pennsylvania that grouse were extremely scarce. One certainty was that grouse hunting did not come up to pre-season expectations in many areas.

Wings and tail feathers submitted by hunters told the story. The ratio of young to old birds was poorer than in 1957 but not as poor as in 1956. The 1958 specimens revealed only 53% young birds. In good grouse years young birds should comprise 70 to 80% of the kill.

Despite earlier reports of good production of young, the season left much to be desired. Analyses of the

specimens confirmed that production and/or survival of young did not conform to the pre-season outlook in many areas.

A comparison of the results of several of the years of analysis of wings and tail feathers indicated that there is much room for improvement in the young bird ratio.

<i>Comparison of Young-Old Birds in Grouse Kill 1952, 1956-58</i>			
<i>Years</i>		<i>% Young Birds</i>	<i>% Old Birds</i>
1952	....	67	32
1956	....	41	59
1957	....	57	43
1958	....	53	47

Our thanks to the hunters contributing wing and tail specimens in 1958. Send us more in '59!



## **Duck Stamp Features Waterfowl Retriever**

A black and white wash drawing featuring a Labrador retriever carrying a mallard drake is the winning design for the 1959-60 Migratory Bird Hunting Stamp, the Wildlife Management Institute reports.

The new stamp establishes a number of "firsts." It is the first time that the stamp has featured a retrieving dog. This was done in order to emphasize that more hunters should use properly trained dogs and reduce the crippling loss of ducks and geese which presently amounts to 25 per cent of the annual bag.

A second "first" is that the new stamp will be the initial issue under a law enacted last year to raise the fee to \$3 in order that the increased revenues can be used to launch an accelerated program for the purchase of wetlands of value to ducks and geese for feeding, resting, and nesting purposes.

And finally, the judges' selection sets a new record for the number of times one artist has won the annual competition. Maynard Reece of Des Moines, Iowa, is the first three-time winner in the history of the contest. His design was chosen from among 110 submitted by 64 artists.

## **Pennsylvania Game Protectors Continue Sound Law Enforcement Program In 1958**

The law enforcement performance of Pennsylvania Game Protectors during 1958 shows there was no let-up in this phase of the Game Commission's wildlife management program. This despite the fact several Game Protector districts were vacant last year, requiring that some of the field officers cover double their normal territory.

Last year, the Commission officers compiled a total of 4,790 Game Law cases. The sum of \$171,471.50 in penalties was deposited in the Game Fund as the result of these legal actions. Both the totals of prosecutions and fines were higher than those for the previous year. In 1957 the Game Protectors brought 4,417 prosecutions from which \$159,006.50 was collected.

Last year Pennsylvania hunters spent less hours afield than in 1957 for small game and bears because of undesirable weather on the opening day of both of these seasons. However, several outstandingly large cases of out-of-season deer killers kept the number of prosecutions and the penalty total high. In numerous instances public spirited people and officers from other enforcement agencies were most helpful.

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## **SCHOOL TOUR GUIDE TO FOREST INDUSTRIES**

Something new in forest conservation education has been added in Pennsylvania.

The Pennsylvania Forest Industries Committee has issued a "Tree Farm and Mill Tours" guide booklet listing 104 Tree Farms, forest industries or industrial woodlands which are open to visits by school groups under specified conditions.

The available tours are scattered throughout the state and range from pulp and paper mills, furniture factories to small sawmills. The individually-owned Tree Farms offer a wide variety of things to be seen including results of selective cutting, planting, Christmas tree growing, pruning of crops trees, ice storm damage and deer browse damage.

The booklet is being distributed to teachers. Single or quantity copies may be obtained from the PFIC, 321 Dauphin Building, Harrisburg.



# OUTDOOR FUN WITH A FUTURE



## Forests and Wildlife

### PART I

By Ted S. Pettit

**W**HEN the first white man came to Pennsylvania he found a country covered by trees. Here and there around Indian villages there were open fields, and in some places large marshes. But by and large a typical eastern hardwood forest composed of oak, beech, chestnut and hickory covered what is now the Commonwealth. Depending on soil and moisture conditions and on altitude, smaller forest types were found too. Pine, spruce and hemlock were mixed

in with the hardwoods in some places and grew in more or less solid stands in others. Even today, there are more than 15 million acres of forest land in the State.

It is only natural then, that some of our most important game animals are those associated with forest areas—deer, bear, turkeys, grouse and squirrels. Woods bison and elk, once found here, are gone. But the other animals remain, and in the case of deer, may well occur in larger num-





bers now than when the first white man arrived.

The story of forest wildlife, and its ups and downs over the years, is largely the story of what man has done with land. For wildlife is a product of the land as are trees and shrubs, corn or soybeans. When man cut and burned over forests to get more agricultural land—when man drained marshes and trapped too many beavers, he also had an effect on forest animals. To understand how this happened, we must start first with why forests grow where they do.

Generally, there are two main reasons why plants grow where they do—climate and soil. First let's look at soil, what it is, where it comes from, and how it affects plant growth.

There are many different kinds of soil, but all of them have a few things in common. They all consist of mineral matter and decayed plant and animal life; they all have some degree of water and air in their make-up.

Every soil too, is a succession of layers one under the other, from the surface down to rock. By studying these layers, scientists can read a story that may be millions of years old, for as soil is formed it records

the geologic history and the climate of the area. You may see these layers by carefully digging a hole three or four feet deep, or by looking at the edge of a hole already dug. Excavations for house foundations or road cuts often reveal layers of soil. These layers when observed in this way are called a "soil profile."

### How Soil Is Formed

We know that once this earth was only rock and water. Now it is covered with soil. How was that rock changed to soil?

The forces that changed rock into soil are still at work, so we do not have to guess at what took place. We can see them for ourselves.

Heat, cold, water, air and plant life all work together to break down rock into soil. It is a long, slow process, but it will go on as long as there are rocks on earth.

Heat from the sun, cooling at night, freezing and thawing, wetting and drying all work toward breaking down rock structure. The minerals in rocks react with water and air to break down rocks still further. Rain falling through the air combines with gases in the air to form a weak acid. This acid helps to break down rocks to finer particles. Plants such as lichens grow on rocks, and give



off a weak acid that helps break down the hard rock.

Wind blowing other rock particles against a larger rock will wear it away. Water carrying rock particles will wear away larger rocks. Glaciers grinding over rocks have helped to wear them away.

When enough of these tiny particles of rock accumulate in one place, plants will move in and start to grow. Bacteria, fungi and lichens move in early and live on the minerals in the rock particles, air and water. As they live and die, they build up this new soil, and change it so that larger plants may grow.

Because soils have been formed from different kinds of rocks in different kinds of climates, there are many different kinds of soils. Some are more rich in minerals needed by plants for growth. Some are deeper than others, and some hold water better than others. Some soils are lighter and permit air to circulate better and get to plant roots. Some are new soils still being formed, others are millions of years older.

All of these things help determine what kinds of plants will grow in a given area. The other thing to

which plants have become adapted is climate.

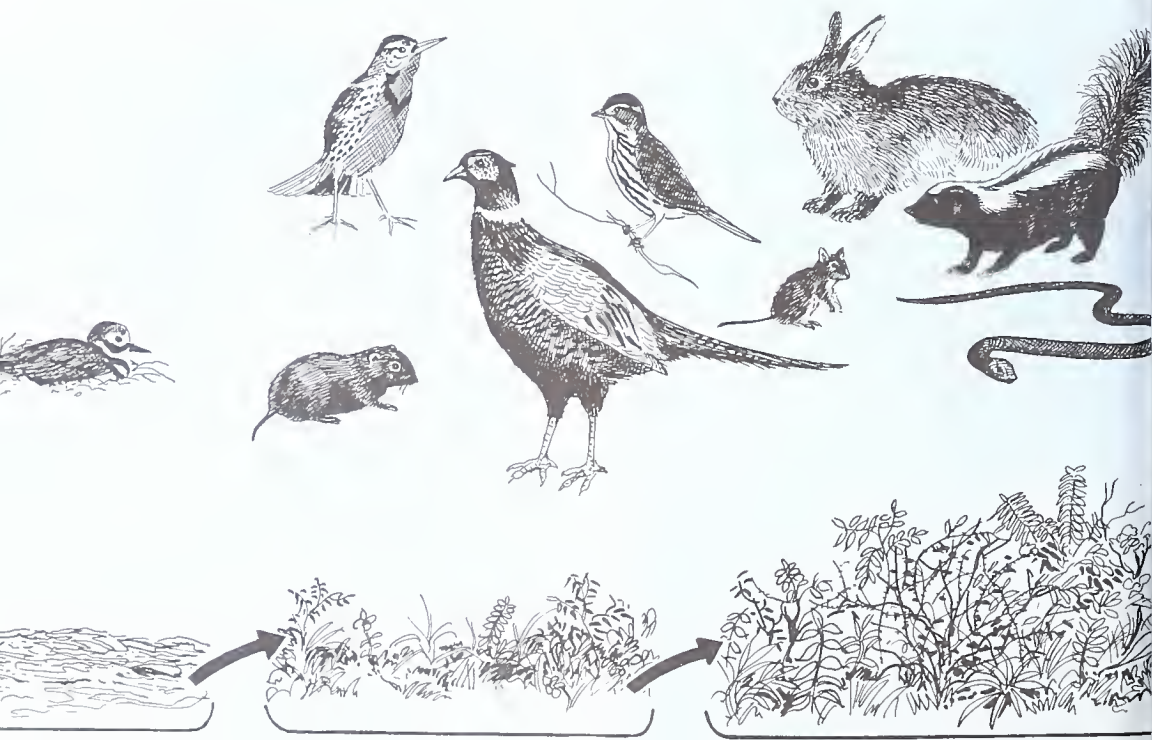
Temperature and rainfall (or snow) over a period of time are called "climate." In the same way that plants have soil requirements, they also have requirements of climate—temperature range from hot to cold, and the amount of water that falls on the earth each year over a period of time.

The central part of the United States and Canada is composed of what we call grasslands or prairie. But the prairie in the eastern part is different from that near the slopes of the Rocky Mountains. One main reason is the amount of the rainfall.

In other places though, there is more moisture, and trees thrive and grow as large forests. Grasses can grow here too, but in nature they cannot compete with trees. Grasses need direct sunlight to grow. Most of them cannot grow well in the shade. Where trees find conditions suited to their needs, they will take over and drive out the grasses.

#### **Plants and Animals Live Together**

Almost every story that you read builds up to a high point, a point in the story where interest reaches its





highest peak. This peak of interest comes toward the end of the story, and is called the "climax." In much the same way the story of nature in action builds up to a high point—a "climax." The chief difference is that the usual story ends when the climax is reached, but in nature the story continues on and on as it has for millions of years.

In nature this climax takes the form of natural communities—groups of plants and animals living together. This climax community has taken many, many years to develop. But once in existence, it will stay that way unless destroyed by wind, fire, or man's actions—or unless the climate changes.

### Plant Succession

When you see a beech-maple forest in Pennsylvania, you are looking at a natural community that is the climax of a long story. What you see may be the last of a long series of communities, each replacing another until the climax community is reached. Let's see how this came about.

We'll start with an area of bare ground. Once perhaps, plants were growing there, but they were de-

stroyed by fire or by plowing for agriculture or by some other cause. This piece of bare ground is somewhere in Pennsylvania. Let's say the time is April.

As you watch that piece of bare ground during the spring, you will see that plants will start to grow on it. They were not planted there, but their seeds may have been in the soil or may have blown in from another place. They may even have been carried there by birds or mammals. Most of the early plants are the common weeds of the roadsides—ragweed, dropseed, lambsquarter, fox-tail, poverty grass and others. These plants will grow, flower and spread their seeds on the bare ground.

By the next year the area will be well covered with weeds but a few other plants may be seen also—plants such as quackgrass, Queen Anne's lace, boneset, goldenrod or dandelion. These plants may grow for several years before the stage is set for the next group of plants. But both the early weeds and these later weeds help prepare the soil and create an environment suitable for other plants that could not get started themselves on bare soil.



Within a few years, when conditions are right, shrubs will start to grow on what was once the bare soil. These shrubs may vary, depending upon local conditions, but include such plants as dewberry, blackberry, raspberry, elderberry, sumac, sassafras, hawthorn, and others. These plants will shade out most of the weeds and will take over as the dominant plants on that patch of soil.

Later on, humus is built up and soil moisture is suitable, trees will move in and gradually replace the shrubs. At first the trees may be grey birches, red maples, ash, box elder or elm. These trees will grow and many of the plants of the previous stage—the shrubs—cannot live in their shade so die out.

These trees may grow for many years, but they too will be replaced. Oaks will move in next, with perhaps basswood and some beech trees. This group of trees will grow for many years but in the end they too will be replaced. Finally, when conditions are right, sugar maple and yellow birch will come in and take over as the climax community.

That does not mean that these will be the only trees growing there. There will be others too—but these trees will be the dominant ones in this climax community and will remain that way unless destroyed by nature or man.

We have seen the natural forces including soil and climate that help determine which kinds of plants and which specific plants will grow in an area. These forces influence the kind of a climax community that will exist in any area.

But the process of plant succession is important too, because this is the natural process that conditions the soil and creates an environment suitable for successive plant stages to grow.

Just as plants have moisture and temperature requirements, they also

have requirements of light—sunlight that reaches them directly or indirectly. Some plants can grow only in direct sunlight. Others can get started only in open shade or even dense shade. There are many variations in between. It is the process of plant succession that makes it possible for plants that germinate in the shade to grow into the forests or prairies that become climax communities.

### Animal Succession

We know that animals depend upon plants directly or indirectly for food and shelter. Just as plants have rather definite requirements of light, soil, temperature and moisture, so do animals have their individual requirements of food, shelter and water.

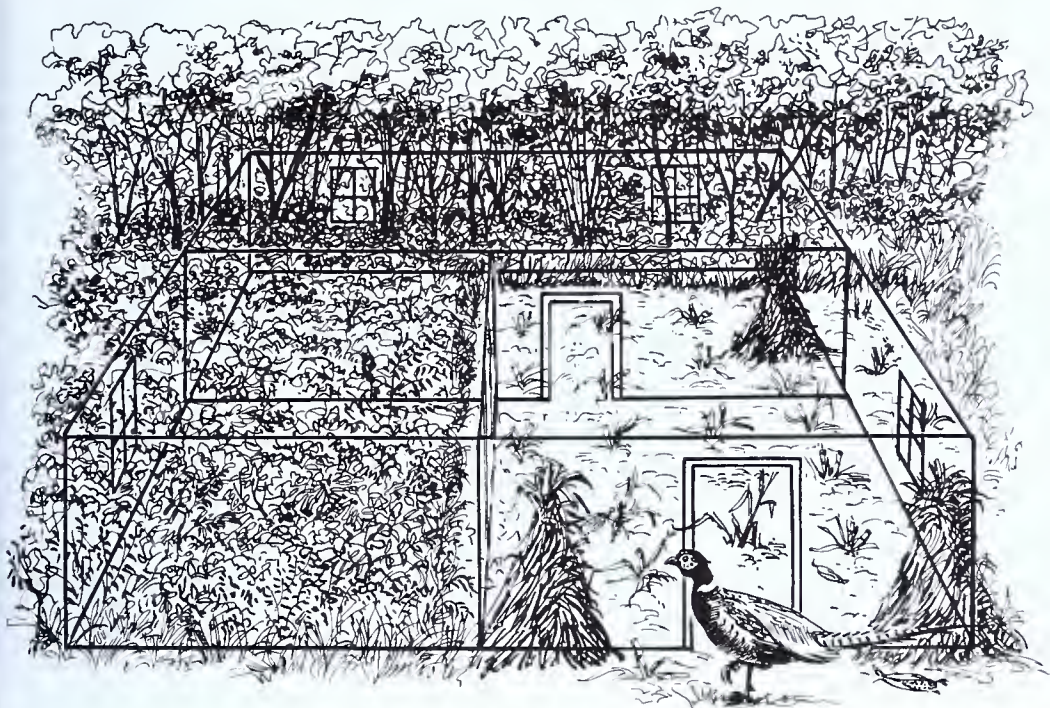
In one old dead hollow tree may live a variety of animals—deermice, squirrels, woodpeckers or perhaps a raccoon or opossum. These animals have similar requirements for cover, but their food requirements are different. Other animals may have similar food requirements, but their cover or water requirements are different. In general, in nature each native animal has a unique position in the natural community where it lives. Biologists call this place its “niche.”

Since animals have their individual needs for life, they find conditions suited to their needs in definite kinds of natural communities. Woodpeckers, for example, feed on insect larvae in tree bark. They also nest in cavities in trees. Consequently, you find them in forested areas where conditions exist that meet these needs.

Beavers need water both for building their homes and for storing food. They can create their own ponds if streams exist, but they are not found very far from water or from the kind of trees the bark of which provides their food.

In general, unless animals find the





conditions suited to their requirements, they will not be found under natural circumstances. Consequently each climax community has a reasonably specific group of animals living in it, and in the same way, each successive stage leading up to the climax will have a few characteristic animals associated with it.

Let's go back to the patch of bare ground and see what happens.

There is not much food or cover on bare ground for animals. Killdeer nest on bare soil and some animals may burrow under it. But the soil itself will not support many larger animals.

The early weed stage does produce some food for animals in the form of seeds or green leaves. Sparrows, horned larks, pheasants, quail and mice may eat the seeds and rabbits may nibble the leaves. But there is not much cover for protection.

The late weed stage provides more food and cover for animals such as mice or rabbits. Birds such as pheasants or quail and sparrows, goldfinches, juncos and such seed eaters would find food. Several birds may even nest in this stage.

The shrub stage will provide nesting sites and food for several birds. Mockingbirds, catbirds, thrashers, indigo buntings, cardinals and quail may nest in this community and cottontail rabbits and mice will find food and cover.

In the tree stage before the climax, other animals will be found. Nesting birds would include flickers, bluejays, crows, cuckoos, flycatchers, warblers, owls, hawks and others. Mammals that would find conditions suited to their needs would be deer, squirrels, bear, raccoons, mice and opossums.

Some of these same animals would be found in the climax forest, but many will not. As the climax grows older it tends to have a smaller variety of plant life in it, and this plus the fact that the larger trees shade out much of the lower growing shrubs results in fewer kinds of wild animals.

### **Why Animals Live Where They Do**

When you think of the elements of the average human home you have a good idea of what wild animals need to live successfully and maintain their populations.

First, animals need a dining room, a place near their den or nest where there is an adequate supply of the different kinds of food they require all year round. Some animals need water nearby too. Others get the water they need from the food they eat.

Next, wild animals need protection. They need a "bedroom" where they are safe from their enemies and where they are protected too from hot sun or cold weather including snow or ice. They need a place where they have privacy and where they can raise their young in safety.

Then, too, they need a "living room," a place to move around. Some animals need more space than others. Some live their entire life in a quarter acre. Others roam for miles. But they need living space where according to the species, they are not crowded.

These elements of "dining room, bedroom and living room" make up what biologists call "carrying capacity" of the land. This means that at any one time, any given area of land can supply the needs for just so many

animals. It means that when the population of one or more animals is greater than the ability of the land to support them, the surplus animals will die or move away. It means too, that different areas of land, depending upon the soil and plant life on them, will differ in this ability to support animals. In broad terms, it means that man to a large degree can influence animal populations by what he does with plant life on the land.

An understanding of this plant-animal relationship starting with why plants grow where they do is necessary before conservation practices are carried out on the land. A tremendous amount of time and money have been wasted in the past and several conservation problems exist today because this relationship was not understood or fully appreciated.

The next issue of the *GAME NEWS* will carry the second part of this article, which will describe several specific things to do in the field of conservation of forest animals.

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## The Way of the Hunter

Under the above title the Tennessee State Game and Fish Commission published the following to explain to non-hunters what motivates a person to go afield with sporting arms:

"The urge to hunt often is incomprehensible to the uninitiated. Some people cannot understand why many men and some women enjoy undergoing hardships, often in bad weather, to pursue wild creatures.

"There are many reasons for the popularity of hunting. Some people hunt because of an inherent desire to pit wits against the natural speed and cunning of wild birds and mammals. Others go afield to watch trained dogs work, to enjoy "roughing it" in the outdoors or to secure unusual types of food. A few people may only seek meat but, considering time and money involved, these gunners probably would do better to visit a market.

"An intangible but inestimable value of hunting, however, is in the recreational aspect which offsets the ill effects of fast-paced living. If over-exertion is avoided, time spent in quiet woods and fields is a refreshing change from humdrum life. Such adventures offer a tonic to soothe frayed nerves, sending the hunter home happier and healthier even though he may be wet and tired."





# "Operation Safety"

By Jim Varner

**T**HIS is the month when the loud, reverberating, staccato drum-roll of the hairy woodpecker comes from the hillside during a lazy afternoon, or the rather melancholy call of the whip-poor-will comes during the evening from across the rippling trout stream. Our 'arm-chair adventures' will soon give way to real outdoor experiences. Easter Sunday was early this year and that usually portends an early spring.

The long session of winter indoor matches and training will soon be over with. Outdoor range work is looked forward to with eager interest as young and old are anxious to put some of their careful planning and

personal theories into practical use under field, or simulated field conditions. Every nimrod is 'rarin-to-go; so to speak. He just has to unleash some of that pent up enthusiasm. This is a tough time of the year for wives and mothers, but they were warned not to marry a fisherman, rifleman or hunter. House cleaning time, gardening and other 'necessary domestic chores just have to wait as shooting is big important business and has to be given priority. You gals pretended to be interested in everything the 'old boy' was interested in before you were married, so grin and bear it or insist on buying a fowling piece of your own and trot where he trots. You may have to tote junior on your back like an Indian, but Indians lived thru the ordeal—so can you.

As stated shooting is now big business. It is estimated the hunting and shooting game in its entirety amounts



to more money spent than all of the household and home furnishings on an annual basis. There are over twenty million hunters in the U.S.A. Our State has around a million. They use over one billion rounds of center fire cartridges and shells of all kinds. This, despite the fact less than 15% of them ever shoot over a regulation target, skeet, or trap range. Due to our military training program more of our young men fire large calibered center-fire arms than ever before. Along with this training they and the rest of our many million shooters use the 22 cal. rifles and pistols extensively, hence, the number of shots fired in this small caliber runs into numbers at least five times as great as all others combined. This is not difficult to understand when one considers the accuracy, light report, low cost, no recoil and convenience of the highly developed 22 cal. rim-fire cartridge.

The steady release of glamorizing articles and colorful advertising on outdoor sports, especially hunting and shooting, by our national maga-

zines is creating an unprecedented demand and interest for all types of hand-guns, rifles and shotguns as well as the additional accessories deemed necessary to complete the picture in each category. This great up-surge of interest is receiving additional acceleration from an increasing amount of T.V. and radio programs which feature firearms and their use, or misuse in some cases, in such a spectacular fashion that one finds youngsters of seven to ten years of age better acquainted with the more popular models than middle aged people were a few years ago. It all sums up to the necessity of a tremendous task ahead for all parents, a job which will have to be versatile enough in its planning to keep up with the modern 'trend.'

Experiences of the past have demonstrated the fact a 'trend' in our country is difficult to keep within reasonable limits on some occasions. It may be in the form of a worthwhile constructive nature that will stay with us and help the country as a whole, or it may border on the

CHECK POINT on different calibers featured this display during "Operation Safety." Ammunition was checked here for correct size and adaptability before the sportsmen were formed into relays of ten shooters each.







**CORRECT SIGHT PICTURE** and firing positions were explained and demonstrated to each squad of shooters. Berkly Ide, Secretary of the Scranton Federated Sportsmen, was the leader at this check point.

ridiculous. In the case of shooting we hope, and expect the increase in its popularity will be met intelligently and it will continue to develop under well trained guidance of a vast host of interested instructors ranging from the individual to the National Rifle Association. Clubs, and even our military personnel 'en-masse' if necessary.

It is natural for youngsters to want to own their own firearms and know how to use them. Most states have an age limit on how old junior must be to drive a car—usually 16 years or over. While some states have laws stating how old a youngster has to be before he can hunt alone, few curtail his owning a firearm at any age as long as accompanied with a parent or adult. Here's where our job commences. His boyish desire to run wild making a big bang with a firearm like he sees in the movies and on T.V. has to be suppressed. Training and planning is very important at this period in his life. We wish to achieve a goal in this case as early as possible, and that goal is safety with firearms as well as a complete understanding of their power and range.

To do this correctly the instructor must impress upon his class or individual as the case may be that he knows his subject well.

Let us call this program 'Operation Safety.' We have not dwelt upon the subject for a few months. Perhaps some of you will consider it an old story and uninteresting. I cannot agree with you here as safety training happens to be a constant factor whether you work in a machine shop, drive a car, operate a locomotive or do any other sort of a job which requires alertness. In firearms training we cannot stress safety too much. Did you ever work nite after nite thru the winter months teaching a group of exuberant youths hunter safety, correct range ethics, good shooting stance and proper procedure in competition until your patience was near exhausted and you felt your whole effort was wasted? Then have them repay you many times over by flawless cooperation during your first outdoor match when all the officials congratulated you on your good work? As Cartoonist Briggs used to say "It's a grand and glorious feeling." Yes,

if we save only one boy or girl from so called delinquency or an accident the effort is well spent.

Our Game Commission was looking ahead last spring when they originated the Hunter Safety Instructor training for some 48 game protector personnel at the Ross Leffler School of Conservation. This training has developed a 'chain letter' type of expansion which has produced hundreds of other instructors, especially among Federated Sportsmen and school organizations. The alert N.R.A. has rapidly expanded its facilities to meet the additional requirements of masses of shooters seeking education and knowledge with the firearm. Our National Guard, Reserve Army, Navy and Marine Corps groups have shown a willingness to assist and here is where we may be missing a good chance for help in our program where it calls for mass training of junior riflemen and hunters. Such units stress safety above everything else. Mass training under the direction of strict military-like procedure seems to instill within the inexperienced the importance of correct safe handling of a firearm. There is no chance for attempted 'horse-play' here.

During the last two years the sportmen of the Scranton area have been entertained by the personnel of the Lackawanna County units of the 109th Infantry for one day's opportunity during October to sight in, and have checked, their rifles prior to the hunting season. The place is the Leach Rifle Range and it is called "OPERATION SAFETY." The range facilities are handled by our excellent National Guard units using everything from their Red Cross equipment to the big generator trucks. Our National Rifle Association Clubs man the firing points and check the firearms for safety in the field as well as head space, and the Federated Sportsmen also cooperate to make the big event a success. Great interest has been shown in this

event with over one thousand hunters and riflemen attending in each case. As they come on the range they are registered and given instructions. From there they have their firearms, high powered rifles in this case, examined by experts who pass on their mechanical condition. Ammunition they have is checked for correct size and adaptability and before they are squadded into relays of ten shooters each they are given one short course or lecture on safety and correct position. Each relay goes on the firing line where the commands are all handled by the military personnel and the instruction on sighting in is handled by registered N.R.A. instructors. They fire from the one hundred yard range on the 12 inch slow fire military target which is not a difficult one but a sensible one in this case. Three shots are fired for correct sight setting from a sand-bag rest and five shots for record.

It is surprising how poor some of our fellows can shoot who class themselves as 'good deer hunters.' Many flinch and seem to fear the recoil of even the lightest calibered rifles like the 25/35 Winchester and 30/30. Many have never checked their sights on anything but tin cans. They figure if the can moves from a bullet fired at 30 to 40 yards from the offhand position the rifle is O.K. We found some of these rifles were so far off they barely stayed on the six foot square target at 100 yds. This field check brought to light several rifles had excessive head space, others unsafe and even dangerous safetys. One nimrod was somehow cramming a 45/70 cartridge into a model 86 Winchester that was chambered for the old 40/82 cartridge and had been using it that way for some time. Ole Saint Peter was not quite ready for this 'big-game-hunter.' One shudders when you think of the amount of accidents that have a right to happen thru ignorance.

"Operation Safety" has been so suc-





TEN EAGER DEER HUNTERS await their turn on the firing line at the Leach Rifle Range of the 109th Infantry, Lackawanna County. Note the elaborate equipment being test fired by some of these riflemen.

Successful it will be repeated this year during the month of October. In fact it accomplished so much our local N.R.A. Clubs, Federated Sportsmen's Clubs and several independent clubs have suggested a repetition of the autumn field day to be held during May or June. This would give a big boost to the morale of youngsters and newcomers who began their training after the hunting season. It is surprising to note how quickly these interested youngsters absorb every step of what is a new and interesting adventure to them. Many are in there with a definite purpose in mind like seeking instructorship registration so they can qualify to handle N.R.A. classes at Boy Scout camps and other recreational camps who feature rifle courses on their programs. Both of our Scranton N.R.A. clubs have boys 15 to 17 years of age capable of doing a better instruction job on safe

firearm handling and correct range and field ethics than the majority of adults.

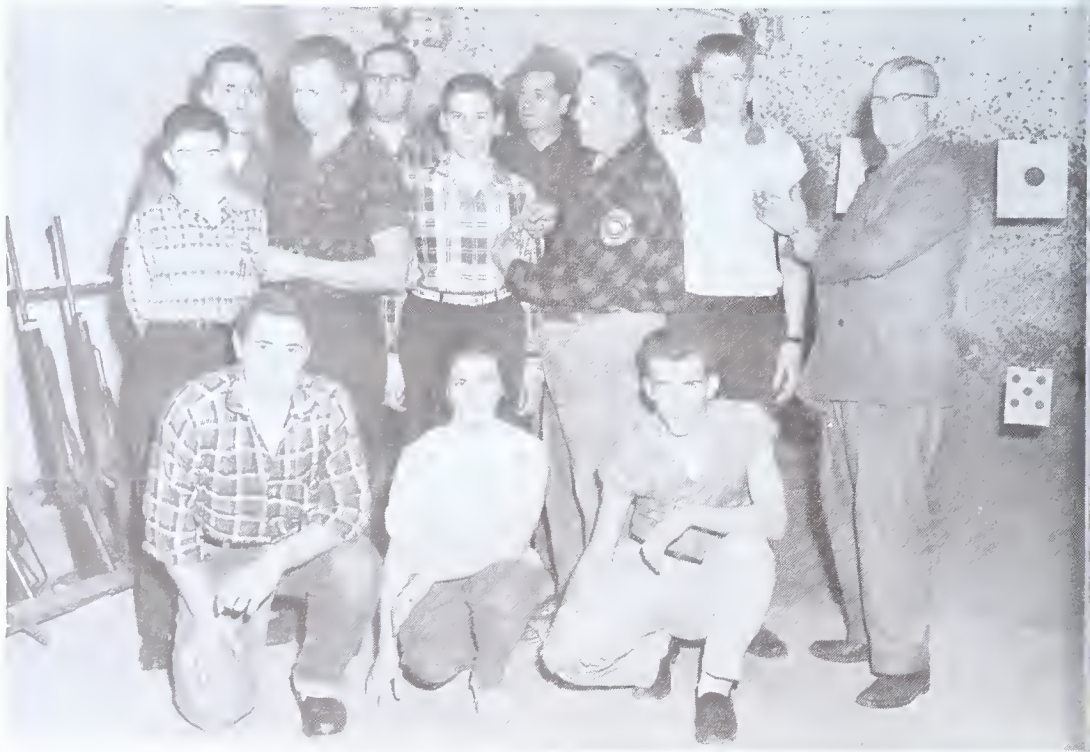
Other lads are just dyed-in-the-wool perfectionists on target shooting and would qualify as embryo ballisticians. The whole subject of interior and exterior ballistics intrigues them. They find it a deep subject that challenges their mental capacity. The very history of the development of explosives and firearms reads like a thrilling story with a lot of scientific equations thrown in to test your mathematical, chemical and physics knowledge. Frequently I drop in on some of my juniors who call me 'the old coach' just to keep in touch with them. An instructor's job never ends with the conclusion of the class period. His job is to develop men. To do so he has to have their interests and problems at heart at all hours. That is where the enjoyment

comes just knowing they depend upon you to help them. I usually find these boys in groups reloading cartridges, polishing old corroded brass cases, or refinishing a Springfield 03-A3 or 45/70 model 73 Springfield. One just does not see these youngsters in juvenile courts. Such boys are always better, more competent drivers; they rate higher as athletes, outshoot and do every endeavor better than the 'hot-rod and smart alec.' We need millions of such boys.

I hope many of you have received enough inspiration from our theme song 'Operation Safety' to put its intended message in your mental notebook and practice it whenever you can even if you have to go out of your way to help some neighbor youngster who longingly eyes you and secretly envies you when you load firearms and other outdoor equipment in the car in preparation for a day afield or week-end trip of pleasant recreation. Remember, you were a boy once. This same thought

goes for the unfortunate, the maimed or the elderly fellows who still love the same outdoor sports we love. Therefore, let us do our best as an individual, do all we can as a club member, and if possible try to interest your military organizations to cooperate as our 109th Infantry so willingly did. We will all be better off if we share the good things we are privileged to possess. Perhaps we can take a lesson from the little author of the 'drum-roll,' the hairy woodpecker mentioned at the beginning of our story. Did you ever watch this unselfish phantom of the hardwood thickets at the suet feeder? He is never aggressive or greedy like certain other birds. He takes what he wants, makes no disturbance and shares what is there with his smaller friends the nuthatch, chickadee or downy. He seems to feel they have as much right as he. Let all of us seek to meet his qualifications as citizens and do our utmost to boost "OPERATION SAFETY."

SCRANTON RIFLE AND PISTOL CLUB OFFICERS presenting medals to Juniors who earned them through outstanding effort, progress in marksmanship and other qualifications. The officers, left to right, are: Alfred "Bud" Ryan, Secretary-Treasurer; Joseph Coville, President; and Jim Varner, Chief Instructor.







## Carp Tips

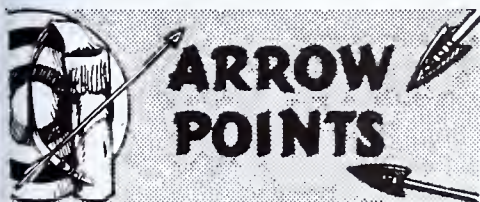
By Tom Forbes

**T**HE carp (*Cyprinus carpio*) is a native of Eastern Asia. In Germany varieties wholly or partly scaleless are bred and are much valued as a food fish. Imported into this country during the last quarter of the 19th Century on the assumption it would provide an abundant source of food, the carp has become so plentiful in warm water lakes and streams that other warm water species cannot compete with these omnivorous feeders. Both vegetable and animal matter are included in their diet. Carp are particularly fond of tender shoots and roots of young aquatic plants, and root up large quantities of vegetation with their

feeding habits. A considerable amount of insects and their crustaceans, and small mollusks are also consumed.

Carp may be taken with the bow and arrow in Pennsylvania, provided the bowman has procured a regulation fishing license. The use of the cross-bow is prohibited and in waters of the State stocked with trout, fishing is banned from March 14 to April 15. This ban applies to the bowman "fishing" for carp with the bow and arrow.

During the spring of the year carp move into shallow water to spawn. These waters may be only inches deep and the backs of the fish are frequently exposed offering an excellent target to the bowman. Shooting carp below the surface of the water presents an interesting problem. Light rays entering water at an angle less than 90 degrees with the water surface produce the phenomena known



as "refraction." A term more familiar to the layman would be "bending." The broken appearance of a straight pole thrust at an angle into the water is a visual demonstration of refraction. For this reason fish beneath the surface of the water when viewed from an angle appear nearer to the surface than they actually are. The bowman must aim below the fish in order to register a hit. This distance must be increased in proportion to the depth of the water above the fish. Only practice will sharpen your judgment until you can determine the correct aiming point. A simple experiment will prove to you the necessity of allowing for refraction. Place a penny in the center of the bottom of an empty coffee cup. Move back until the penny is just hidden by the lip of the cup. Now pour water into the cup from this position and watch the penny come into view. You view the carp in exactly the same manner in which you see the image of the penny.

There is a wide variety and choice in tackle used for bowfishing. The arrow should have a barbed fishing head which will penetrate the thick scales of the carp and still hold in the soft flesh. There are a number of commercial fishing heads on the market or you can sharpen a field point, drill a hole thru the ferrule and fit it with wire barbs. Drill another hole thru both ferrule and shaft and attach to this a wire leader approximately seven inches long. If you attach your line directly to the head it may fray and break while you are playing your fish. Carp can be rough on wooden shafts; a fiber glass shaft will take more punishment. Fifty feet of 70-lb. test line and a bow reel will complete your outfit. The bow reel may be taped to the upper or the lower limb of the bow. One outfit on the market resembles the top of a milk can and the handle is gripped with the bow hand. One advantage claimed for this

reel is that once you have tied into your carp you can lay aside the bow and use both hands to play your fish.

To prevent line drag on the head of the arrow it is customary to thread the line thru a hole on the shaft just forward of the nock and some bowmen tape the line to the shaft at mid-point with waterproof tape. At close range no fletching is necessary. At distances up to 25 feet you can shoot accurately with unfletched arrows. For longer shots use one of the rubber fletchings on the market. Feathers immersed in water become matted and useless as fletching.

Before you start out on a carp shooting trip you will need practice with this complicated outfit. The heavy arrow and line drag will necessitate some change in your elevation when you are sighting on your target. The line should be wound on your reel from back to front so that it will come off freely. Be careful of this outfit. A fouled line can bring the arrow flying back in your direction. It has happened and bowmen have been injured. As a precaution wear a glove on the shooting hand especially if you do not have an arrow rest on your bow. Too, a gloved hand makes playing a fish easier with less chance of line burns.

Spinning reels are frequently used as bow reels. A braided nylon spinning line 18 pound test should handle your fish. Tape the reel to the bow with the handle on the opposite side of the bow from the arrow rest. Be sure that you press the release button before shooting.

The carp got off to a bad start when it was introduced in this country by textile manufacturers in New England to supplement their employees diet in lieu of an increase in wages which would permit them to purchase additional food. The carp were placed in the mill ponds and employees were expected to fish for food in their off hours. Naturally the employees would have no part of the





scheme and refused to eat carp. Bow-hunting for carp is not only an excellent and exciting sport, but when properly prepared for the table authorities claim it can be superior to many species which are regularly enjoyed by those who like a mess of fish. Carp needs special preparation or it will be bony and strong flavored. Next time you land a three pound carp try this method of preparing a dish of fried fish. Skin the fish and fillet it by removing a fillet from each side so as to eliminate the fins and backbone. There is a strip of dark meat on the fillet which is removed by cutting a V-shaped groove along this strip with a sharp knife and discarding this dark portion of the flesh. This is the part of the fillet that would give a strong or muddy flavor. Lay the fillet on the table and score crosswise with a sharp knife. Cut almost thru the fillet at intervals of  $\frac{1}{8}$  to  $\frac{1}{4}$  inch. Season lightly and roll the fillets in flour. Shake off the excess and fry in deep fat heated to 350 degrees. A cooking thermometer is essential in any deep fat frying. If the temperature is too low the food will be greasy, too high and the outside will burn before the center is cooked. Follow this process of preparing the fish and aside from the large rib bones all the small bones will be thoroughly cooked.

If you are one of those folks who do not care for fish as food there are several ways of disposing of your catch which will not bring discredit on bow fishing. A little inquiry and you will find many persons who will welcome a gift of your catch. If you have a garden at home they make excellent fertilizer. It was the custom of the Indian to bury a fish with each hill of corn. Avoid tossing the fish on the banks of the stream. Many fishermen pass that way and they get a dim view of bowfishing when they find the fish wasted in this manner.



SUCCESSFUL BOW HUNTERS of the Ephrata Bowmen received club trophies for their harvest of two bucks and four antlerless deer during the 1958 season. The amazing part of their story is that they represent one-third of the total club membership. Organized in 1958 with 18 members, the club has built a 28-target field course and credits the success ratio to consistent practice of members. Shown with their trophies are, kneeling: Dave Irvin and Melvin Weber. Standing, left to right: Robert Enterline, Martin Hollinger, Robert Krepp and Paul Burd. Irvin received the trophy for the heaviest doe while Weber received his for the biggest buck.

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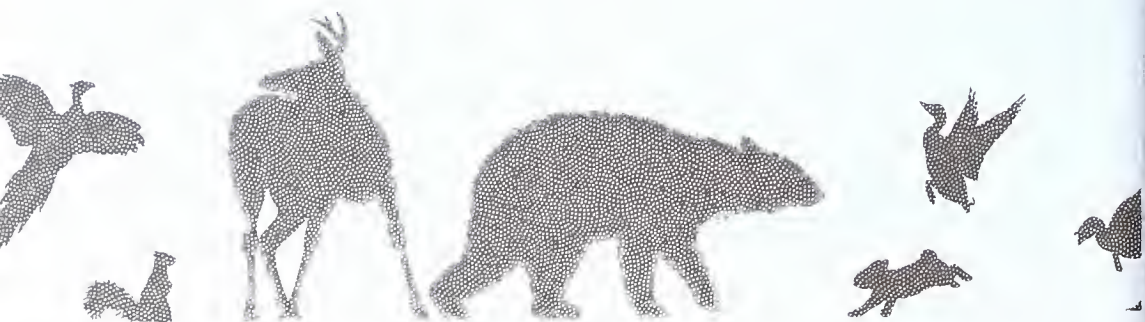
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TEN CENTS



Mountain  
Laurel



Ruffed Grouse



Hemlock

NED SMITH

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# Pennsylvania's State Tree, Bird and Flower

## HEMLOCK

By Act No. 233, approved June 22, 1931, the General Assembly selected the hemlock (*Tsuga canadensis* Linnaeus) as the official State tree. Pennsylvania, the only State embodying the idea of trees and forests in its name—Penn's Woods—thus acquired by an Act of legislation something that few states possess. France has her fleur de lis, Scotland has the thistle, Ireland has its shamrock, but Pennsylvania has her official state symbol, the hemlock.

In declaring and adopting the hemlock as the State tree of Pennsylvania, the General Assembly considered that the hemlock is still today, as it was of old, the tree most typical of the forests of Pennsylvania; the hemlock yielded to our pioneers the wood from which they wrought their cabin homes; the hemlock gave its bark to found a mighty industry; the hemlock everywhere lends kindly shelter and sure haven to wild things of the forest; and the lighted hemlock at Christmas time dazzles the bright eyes of the child with an unguessed hope and bears to the aged, in its leaves of evergreen, a sign and symbol of faith in immortality.

## RUFFED GROUSE

By Act No. 234 of the General Assembly, approved June 22, 1931, Pennsylvania adopted the "king of the game birds," the ruffed grouse (*Bonasa umbellus*) as its official game bird. Of Pennsylvania's six resident game birds, the ruffed grouse is the most difficult to hunt, the most mysterious in its habits, and the most thrilling in its behavior. For centuries men with gun in hand, heart in the autumnal highlands, and the swish of fall leaves in their faces have sought this native citizen of Penn's Woods. It typifies all that is wild and free; it displays courage, skill, and survival of the fittest. There is no finer symbol of the Keystone State.

## MOUNTAIN LAUREL

By Act No. 107, approved May 5, 1933, the General Assembly adopted the Mountain Laurel (*Kalmia latifolia*) as Pennsylvania's official State flower. Mountain Laurel normally begins to bloom in Pennsylvania during late May and its pink and white blossoms are found in wooded areas well into June. Thousands of tourists from our cities and other states are attracted to the mountains each year to view this seasonal display of natural beauty. One of the few broad-leaved shrubs native to the Commonwealth whose leaves are evergreen, the Mountain Laurel is distributed throughout most of the state's 15 million acres of forestland. It is particularly abundant in Pike and Monroe counties in the northeast, Tioga County in the north, Jefferson and Clarion counties to the west, Centre and Huntingdon counties in the central portion of the state, and ranges widely through the "southern tier" districts. It is illegal to pick, break, damage, dig out or transplant Mountain Laurel (or other wild shrubs and flowers) from public or private forest lands.



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Commonwealth of Pennsylvania

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Cover Painting

By Ned Smith

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# The Battle For Space

By Maurice K. Goddard

Secretary, Pennsylvania Department of Forests and Waters

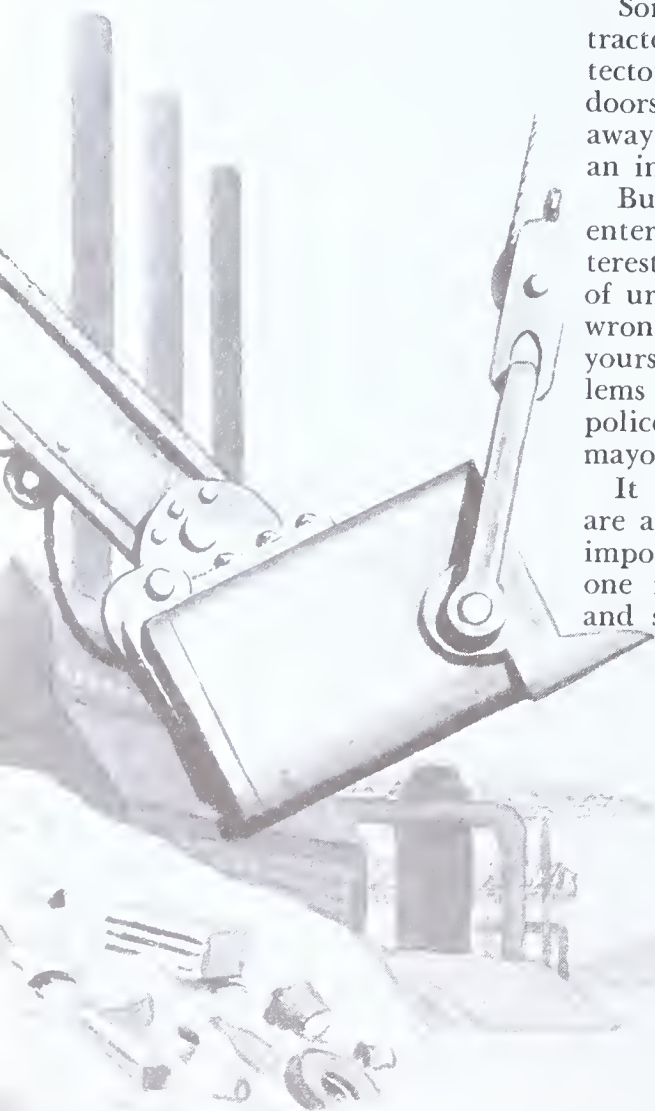
A Speech Delivered At The  
Graduation of the Ninth Class of Student Officers  
The Ross Leffler School of Conservation  
March 21, 1959

**Y**OU gentlemen who are graduating here today are about to become guardians of a priceless Pennsylvania asset—our wildlife and the forests which shelter it.

Some of you may have been attracted to the life of a game protector because you like the out-of-doors; because it is a wonderful life away from the hub-hub and dirt of an industrial civilization.

But I tell you today that if you are entering this vocation because it interests you more than the problems of urban life, you are going into the wrong business. You are going to find yourselves as involved with the problems of urban living as any city policeman, building inspector, or mayor.

It is my sincere opinion that you are about to enter into an extremely important arena of modern living—one involving some major national and state problems.





Allow me to explain what I mean.

We are engaged in a critical Battle for Space. And just because the rockets and the missiles are grabbing the headlines at the moment, don't think for one instant that the Battle for Space is going on somewhere out beyond the Moon.

The really important Battle for Space—important for our national survival and our economic well-being—is taking place right here on God's Green Earth.

If you think this is merely a figure of speech, allow me to recite a few facts of modern life.

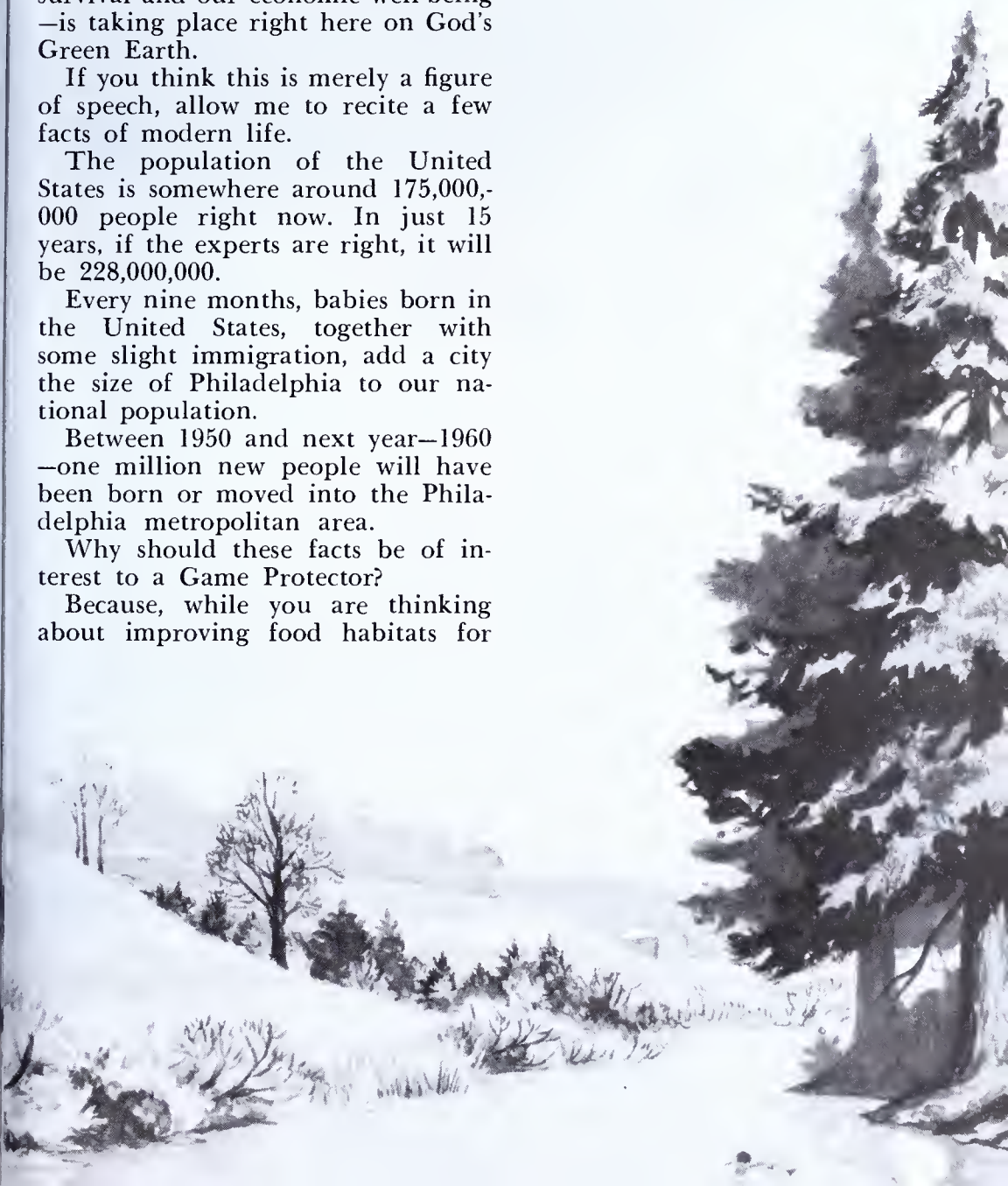
The population of the United States is somewhere around 175,000,000 people right now. In just 15 years, if the experts are right, it will be 228,000,000.

Every nine months, babies born in the United States, together with some slight immigration, add a city the size of Philadelphia to our national population.

Between 1950 and next year—1960—one million new people will have been born or moved into the Philadelphia metropolitan area.

Why should these facts be of interest to a Game Protector?

Because, while you are thinking about improving food habitats for





ONE HALF MILLION ACRES of farmland are taken out of production each year to make room for the sprawling growth of our cities.

ducks or increasing our wild turkey population, you are going to have to start thinking more about another animal—the human being.

The flood of babies born into this world means a lot of problems for you and me. We are interested in preserving as much of the natural beauty and wildlife in our state as we can. But the baby boom is going to make this a very difficult job. Our cities are growing at an astounding rate, gobbling up the countryside so quickly that you can almost stand and watch it happen.

Each day 3000 acres of land are bull-dozed under to make way for housing developments, highways, and shopping centers.

Each year, one half million acres of farmland are taken out of production to make room for the sprawling growth of our cities.

The need for land has created an immense pressure upon our State Forest and Game Lands. Every day a new interest wants to encroach on these lands for one reason or another. It is going to take an increasing amount of fortitude to withstand

these pressures. Allow me to cite one example.

As our cities get bigger and our population spreads farther and farther across the face of the land, transportation becomes more and more important. To meet the need for better transportation, construction has started on a 41,000-mile Interstate Highway system. I am all for these new roads. They are urgently needed. But allow me to show you the kind of problem it will make for you as men keenly interested in preserving our wildlife and other natural resources.

The Pennsylvania Turnpike, obsolete by modern standards, has a 200-foot right-of-way. Every mile of the turnpike, if you figure it out, takes about 25 acres of land.

About 50 acres are needed for a modern highway. The Interstate program in Pennsylvania calls for 1500 miles of new roads. This means that 75,000 acres of land will be required in Pennsylvania alone for the Interstate system.

Our studies show that it takes about 40 acres to feed one deer.



Cover thousands of acres of deer grazing land with concrete and you see what happens.

This is not to mention, of course, the impact upon our wildlife when a fenced-in, limited-access highway is built right across their grazing range.

And don't think that these pressures are off somewhere in the future.

One of the vital links in the Interstate System will be the Pennsylvania Shortway. As all of you know, just a day or two ago ground was broken for the first link in the Shortway nearby in Brookville. While this start at construction of the Shortway has been proclaimed as a great economic boom to the northern half of the state, we in the field of conservation must also see it as something of a loss in other respects. This important and badly needed highway will cross the state's midriff where a great deal of our state forest and games lands are located. The Pennsylvania Shortway Association said in its most recent bulletin that one of the factors in favor of the Shortway is the fact that it will traverse state-owned lands and therefore will not cost as much as it

might have if built across lands being used for other purposes.

A day or two ago I read about another gentleman calling for a highway between Buffalo and Baltimore, who pointed out that such a road could be built through state forests, thereby reducing the cost of the highway.

It has apparently not occurred to this man, nor to some members of the Shortway Association, that the public forest and game lands were purchased for a reason just as important in its way as the need for new highways.

This is just an example of the kind of pressure that is going to be exerted on our state lands as our population booms.

Our wildlife is by no means the only resource affected. I do not need to tell any of you about the delicate balance which exists between man and his environment. Our wildlife kept in balance helps both the farmer and the city dweller in many ways. The forest which shelters this wildlife provides recreation, a renewable timber resource, and perhaps still

ALMOST FIFTY ACRES of land are needed for each mile of modern highway. The new Federal Interstate Highway System in Pennsylvania will require 75,000 acres in Pennsylvania alone.



more important, protection against floods and soil erosion.

Destroy this balance and you destroy the economy of our Commonwealth. I can recite for you the names of a dozen past civilizations that crumbled into dust because they seriously violated this balance.

To show you our problem, allow me to quote Dr. Edward Higbee of the University of Delaware, who spoke before the National Wildlife Conference a few weeks ago in New York.

"In less than 20 years," Dr. Higbee said, "the population of the United States has increased by 50 million people. In this century the world has used up and lost forever more natural resources than in all previous history. And there are now alive, with an unprecedented appetite for resources, 10 percent of all the men who ever lived on this earth; 25 billion people in the long million years since the dawn of men; 2.5 billion since Yellowstone National Park was created."

Again, I want to emphasize that I am not disputing the need for more highways, or more housing, or more industry. As a matter of fact, I don't see how anyone can oppose such things in view of our population boom.

But I *do* think that we have reached the point in this nation of ours—so rapidly filling up with people—when it has become imperative for us to sit down and decide what kind of society we want. There is no longer room for the indiscriminate abuse of our land. We must decide now, before all the land near our cities is gone, what kind of uses we want to make of the land we have. It may be too late in just a few years.

Many people, in favor of zoning laws for residential and industrial development, make the mistake of thinking that reserving lands for forest for the propagation of wildlife and parks has little economic justifi-

cation and that these land uses, therefore, should receive lower priority than others.

I say to these people that they are dead wrong and had better revise their thinking before too much damage is done.

Modern industry is a new breed of cat. It is profoundly concerned with the morale and health of its employees because it knows that these days a happy business is a prosperous one.

I receive in my office many inquiries from great industrial concerns interested in locating in Pennsylvania. They want to know the recreational assets of a locality before they finally select a site. "Where can our families go to swim, picnic, hunt, or fish?" they ask.

Ignore the immeasurable flood control and soil conservation benefits of our forests. Debunk the asset of our wildlife. Still the economic value which our recreational facilities offer in attracting new industry to the Commonwealth remains.

Recreation has become a permanent and necessary part of the American scene. Recognizing this, President Eisenhower last year appointed a special commission to look into the nation's Outdoor Recreation Resources. Mr. Laurence Rockefeller, chairman of the commission, said just last week that people used to think that recreation was a waste of time.

"We can recognize as a sign of our reaching maturity as a people that this attitude is beginning to change," Mr. Rockefeller said. He continued: "We are beginning to recognize that outdoor recreation—as a healthy, satisfying, and often creative use of leisure time—has evolved from a luxury of a few to a necessity of the many."

Just as a symptom of this growing interest in the out-of-doors, allow me to remind you that last year 20 million people used our state parks. Use of the parks has tripled in 7 years. People who tent-and-trailer camped





alone increased by 100,000 in one year's time.

Pennsylvania is one of the leading states in the number of hunters licensed. No state offers more diversified hunting opportunities.

We are fortunate, in that, although Pennsylvania is one of the leading urban and industrial states of the nation and one of the most heavily populated, we stand high in the amount of publicly-owned forest and game land. This is an invaluable attraction for new industries. It is a priceless heritage for our citizens.

Incidentally, it is worth noting on this last day of National Wildlife Week that Pennsylvania is one of the few states in the United States that showed a distinct increase in the number of hunters over the past year. With the possible exception of New York, no eastern industrial state can offer better fishing and hunting attractions.

I remember the envy expressed by one Ohio official in a conversation a few months ago. Ohio, like Pennsylvania, is heavily populated. Yet, that state has only a few hundred thousand acres of recreational land compared to our nearly three million.

We must search for and reserve as much land for recreation as we can

find before it is claimed for other uses.

But to acquire it is not enough. We must also protect it daily from the threat of encroachment—from interests who forgot the needs of the future in order to meet the exigencies of the present moment.

This is not an easy task. Each day sees new requests for a road, or a pipeline, or a power line right-of-way through our forests. At times we must accede to these demands. But we have reached the point where each request must be carefully weighed in the public interest.

All of the needs of our society are now beginning to compete with one another. Greater and greater demands are made upon our land, water, and forest resources. If we are to resolve this conflict in the best interests of Pennsylvania, all of these interests must sit down together and work out a plan for the Commonwealth's future. Cooperation is the only means for meeting the challenge.

The Fish and Game Commissions and the Department of Forests and Waters have established a wonderful spirit of cooperation in developing the state's natural resources for the recreation of our citizens.

The Department has seeded old logging roads for the Game Commission, as one example. We have also helped the Commission in problems of erosion.

The Commission and the Department traded 1000 acres of land last year so that Forests and Waters will be able to build a new state park in Cambria County and the Game Commission will be able to consolidate some of its game land holdings.

The Fish Commission and the Department of Forests and Waters worked together to create the new Gouldsboro State Park, opened last year.

There has been praiseworthy cooperation from other state agencies too. The Highway Department has built roads and bridges in some of our state parks.

Much more could be done. Fill from road-building, for example, could be used by the Department of Forests and Waters in construction of dams at our new state park sites or by the Fish Commission and Game Commission in creating new fishing lakes or waterfowl refuges.

When there is no alternative but to extend a road through state forests, then there must be an arrangement where other lands can be exchanged for the public land lost.

Home builders and developers, industrial planners, and the municipalities of the state must join hands, too, in setting aside some of the remaining open lands for recreational use.

One word of warning in closing. You will be working for the Commonwealth. You will find that working for Government is not an easy job, and sometimes can be quite frustrating. Some will accuse you of following too restrictive a policy. Others will say that you are not restrictive enough. Some will condemn you for not doing enough for wildlife. Others will claim that you do too much. At times you will wonder whether your work has been recognized. But you will always have the satisfaction in the end of knowing that you are working for the people and this has its own rewards.

Theodore Roosevelt once said in talking about our famous predecessor in Pennsylvania conservation, Gifford Pinchot:

"It is not the critic who counts, not the man who points out how the strong man stumbled or where the doer of deeds could have done them better.

"The credit belongs to the man who is actually in the arena; whose face is marred by dust and sweat and blood; who strives valiantly, who errs and comes up short again and again; who knows the great enthusiasms, the great devotions, and spends himself in a worthy cause; who at the best knows in the end the triumphs of high achievement; and who at the worst, if he fails, at least fails while daring greatly; so that his place shall never be with those cold and timid souls who know neither defeat nor victory."







## WALKIN' SHOES

By NED SMITH

# Warblers On The Move

1. Why is the ovenbird so-named?
2. Some warblers seen in Pennsylvania have come from as far south as South America. True or false?
3. What warbler wears a "bandit's mask"?
4. Can you name our largest warbler?
5. Because of their seed-eating habits warblers destroy countless noxious weeds. True or false?
6. What common warbler is striped with black and white like a zebra?
7. One of our common warblers is often heard singing on moonlight nights. Which one?
8. Why is the myrtle warbler so-named?

**I**F YOU are not already familiar with those fascinating little birds we call the wood warblers, you should not waste a bit of time making their acquaintance. At this very moment they are passing through Pennsylvania's forests and orchards on their annual trip north, some heading for Canada and Alaska from wintering grounds in Central and South America. In central Pennsyl-

vania the migration reaches its peak around the second week of May and, although the birds sometimes trickle through in a steady but unspectacular stream, they just as often appear in unbelievable numbers. Frequently, a cold front halts the movement, damming up the flow from the south. When the resulting concentration begins to move, the forests are literally crawling with warblers.

Of the 160 species of wood warblers about 36 different kinds visit Pennsylvania. With the exception of one, the yellow-breasted chat, they are dainty little birds of from 4½ to 6 inches in length. They wear any conceivable pattern of markings and come in assorted colors—yellow, orange, blue, red, green, chestnut, gray, black, and white to name a few.

They are extremely active birds, as you will learn when you attempt to keep one in the field of your binocular as he flits from branch to branch.

Insects form the bulk of their diet. Some specialize in examining the bark of trees for hidden food. Others go through the foliage with a fine-

BLACK-AND-WHITE  
WARBLER



MYRTLE  
WARBLER



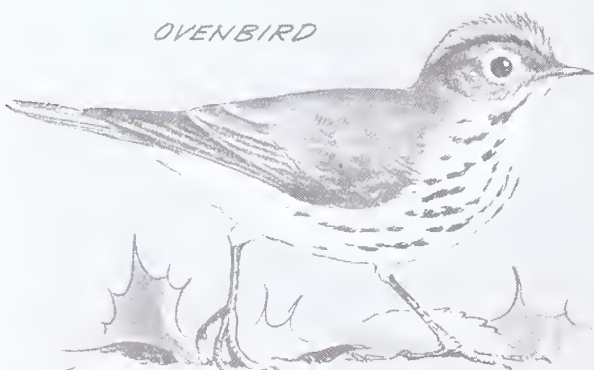
BLACK-THROATED  
GREEN WARBLER



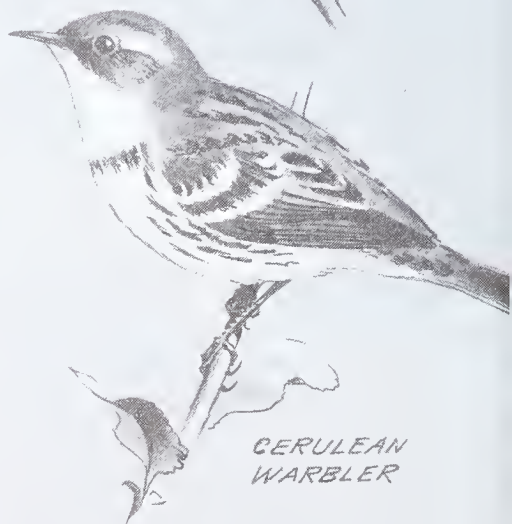
CHESTNUT-  
SIDED  
WARBLER



OVENBIRD



CERULEAN  
WARBLER





toothed comb. Still others are adept at snatching flying insects out of the air. During the nesting season caterpillars are their main fare, and the inch-worms that are poked down the throats of infant warblers would stagger the imagination.

Space won't permit the inclusion of more than a fraction of our warblers in this article, so I chose the following twelve species. All of these but the myrtle warbler are known to nest in Pennsylvania, and the latter is sometimes encountered here during the winter months. There are many other wood warblers that rear their young in our state, but these will be treated at some later date.

**1. Black and white warbler**—Few birds are as unmistakable as this boldly streaked black and white busybody. If its plumage is unique among warblers its manner is even more so. When not singing a high, thin *teese*, *teese*, *teese* the black and white is constantly hopping up, down, and around the tree trunks searching for insects like a zebra-striped nuthatch. The female is similarly patterned, but her colors are duller.

**2. Myrtle warbler**—Frequently traveling in flocks the myrtle is one of our earliest warblers to appear. It is blue-gray bird with white underparts streaked with black. Four yellow patches—one on the crown, one on the rump, and one on each side of the breast—make identification easy. The female is similar but with brownish upperparts.

This warbler was so named because of its fondness for the berries of the wax myrtle, or bayberry. The few individuals wintering in our state apparently find poison ivy berries an acceptable substitute.

**3. Black-throated green warbler**—Although known chiefly as a migrant this pretty little warbler frequently nests in the hemlock forests of northern Pennsylvania. It is an olive green bird with yellow cheeks, black throat and upper breast. The rest of the

underparts are white, the sides streaked with black. The wing bars are white. In the female the black is generally confined to scattered spots on the upper breast and streaks along the sides.

The black-throated's song has a quite distinctive buzzy quality.

**4. Chestnut-sided warbler**—You'll have no trouble identifying this handsome fellow. His plumage shows considerable white which, together with the yellow crown, black triangle on the side of the face, and chestnut streak on each side of the body, makes identification simple. This bird nests in many parts of the state, seeming to prefer brushy hillsides of forest understory for its summer home.

**5. Ovenbird**—This thrush-like little bird's extremely loud cry of *teacher*, *Teacher*, *TEACHER*, *TEACHER* ringing through the woodlands is one of spring's familiar sounds. An entirely different performance, a flight song uttered as the bird flutters high above the treetops, is one of the most intricate and inspired in nature. In coloration the ovenbird is tawny olive above, with a black-bordered orange-brown crown and a prominent white eye-ring. Its underparts are white, streaked with black. The name *ovenbird* is derived from the fancied resemblance of its odd nest, a dome-shaped structure with a side entrance, to an old-fashioned oven.

**6. Cerulean warbler**—This delicately colored bird is rather common in southwestern Pennsylvania, but is quite rare in the rest of the state. Unfortunately it spends most of its time high in the trees, consequently its presence is often unsuspected even where plentiful. Its upperparts are grayish blue, somewhat streaked with black. The underparts are white with a blue-gray band across the upper breast and blue-black streaks on the sides. The wing bars and a line behind the eye are white.

**7. Yellow warbler**—As the name im-

plies, this bird is predominantly yellow. Its upperparts are washed with olive, while the breast is finely streaked with rust. The wing bars are yellow. Mrs. Yellow Warbler is duller than her mate and the breast streaks are faint or entirely wanting.

Because of its abundance and its inclination to nest in the shrubbery of our gardens this bird is probably our best known warbler. It is one of the species most commonly victimized by the parasitic cowbird.

**8. Magnolia warbler**—This exquisite warbler does nest in our up-state hemlock forests, but is more often seen during the spring and fall migrations. Its coloration is quite striking. The upperparts are chiefly black, although the crown is gray, the markings around the eye are white, and the rump is yellow. The wingcoverts form a large white patch. Its underparts are bright yellow, boldly streaked with black. As usual, the female is considerably duller in coloration.

**9. Redstart**—Considering its abundance and attractive appearance this pretty warbler is not as well known as it deserves to be. The male's upperparts are black. The center portion of all but the middle tail feathers is salmon in color, a salmon band crosses each wing, and a patch of somewhat deeper hue marks each side of the breast. The chest and throat, too, are black. In the female's plumage the black is replaced by gray and the salmon by pale yellow. Her throat and breast are white. The redstart has a pleasing habit of drooping his wings, spreading his tail, and pirouetting prettily, as though vainly modelling his fine attire. Appropriately enough, in view of his fondness for catching flying insects, Nature has given the redstart a rather wide, flat bill generously fringed with bristles, much like the bill of the true flycatchers.

**10. Hooded warbler**—This plump fellow is named for the black hood that

covers his crown, throat, and chest. The rest of the upperparts are olive, the outer tail feathers having white on the inner vanes. The underparts are rich yellow. The female has only a hint of a hood. Once you learn to recognize this bird's bold song you will find the hooded warbler is one of the more common warblers of our woodlands. Because it haunts the undergrowth rather than the treetops it is easily observed.

**11. Yellow-breasted chat**—This amusing fellow differs from other members of the warbler family in many ways. He is much larger, for instance, exceeding the average warbler by a good two inches in length. His bill is stout, his tail long, and his repertoire of clucks, whistles, squawks, and chats is most un-warblerlike. Flushed from his favorite thicket he flits to another hiding place, long tail flopping loosely as he flies. When the moon is bright it is a common thing to hear the chat singing away any hour of the night. He is a handsome fellow, with his incredibly yellow throat, chest, and breast. His upperparts are olive, while the cheeks are blackish, and the eye ring white.

**12. Maryland yellow-throat**—Like its over-sized cousin, the chat, this diminutive warbler haunts brambly thickets, fencerows, and swamps, seldom venturing far from cover. As a rule, the first indication of its presence is sharp *chek* coming from the depth of a briar patch. The song is quite different—a ringing *wichity, wichity, wichity*.

## ANSWERS TO THE QUESTIONS

1. Because his roofed-over nest resembles an old-fashioned oven.
2. True.
3. The Maryland yellow-throat.
4. The yellow-breasted chat.
5. False. Warblers live almost entirely upon insects.
6. The black and white warbler.
7. The yellow-breasted chat.
8. Because of its fondness for wax myrtle berries.





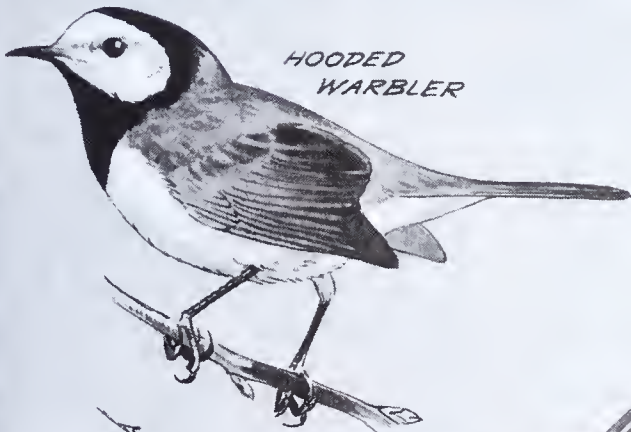
*YELLOW WARBLER*



*MAGNOLIA  
WARBLER*



*REDSTART*



*HOODED  
WARBLER*



*YELLOW-  
BREASTED  
CHAT*



*MARYLAND  
YELLOW-THROAT*

*NED SMITH*



# Haunted Hunting Grounds The River of Hate

By Don Neal

**A**LTHOUGH the valley of the Clarion river is not the wildest, nor the most remote, of the hunting grounds available to the Pennsylvania hunter, it is certainly unique and outstanding in one respect; its historical background. For to this valley, so situated that the waters of its tumbling river furnished one of the most direct routes to the unsettled, unexplored wilderness of the West, came many of the trappers, traders and missionaries who are credited with being among the first of the white men to cross over the great divide of the Alleghenies and float their canoes down into a new land that spread out towards the setting sun. By making the Marvin Creek



portage, these travelers, most of them coming from New York and other northern colonies, could cut out the big bend of the Allegheny, descend the Clarion, and take up again on the major river well down towards its confluence with the Ohio.

Because of this, the Clarion river was an important waterway. Yet it never gained the importance it might have had, for it lay in a contested area somewhat of a no-man's-land, between two powerful Indian tribes. Both the Delawares and the Senecas claimed the valley. And although neither of them considered it worth the cost of holding it, both were extremely concerned with what went on there. As a result, skirmishes between war and hunting parties of the rival tribes were far from uncommon, especially in that section of the valley where the town of Clarion is now located. So intense were the feelings between the Delawares and Senecas at the time the French first came to the Clarion that they referred to it as "riviere au Fiel," or, River of Hate. Consequently, in those times, it was only the brave or the foolhardy who dared to course the river or pitch their camp on the moss-covered floor of this controversial valley.

Yet even in the thickest of this bickering between the two tribes there was one Indian who wandered up and down the Clarion with his hunting parties, going where and when he pleased. He was Go-go-wah-sah, a Seneca, who was known to the white men as Jack Snow.

Jack Snow was an odd name—but a logical one. For Go-go-wah-sah, in the old Seneca tongue, could be interpreted to mean Snow Snake, and in the Seneca way of saying it in English could have sounded like "Snow Jack." To the White Man such a name would make little sense, so it would be turned to make it Jack Snow. Yet even the name Snow Snake, as the Seneca intended it, wasn't derogatory in its meaning. For

Go-go-wah-sah, or Snow Snake, is a highly skilled game of the Indians and to be a good player is considered a mark of great respect.

Go-go-wah-sah, or Snow, was well liked and respected by his own tribesmen; but decidedly, and desperately, feared by the Delawares. In some manner, and at some time, he had convinced these natural enemies of his that he possessed a powerful medicine that would bring disaster to any man who crossed him. They were convinced as only a superstitious Indian could be convinced. And while both the frightened Delawares and his brother Senecas had to be content with hunting grounds that were gradually being overrun by the White Man and his settlements, Go-go-wah-sah, plying the grounds on which either of these feared to tread, had the lush Clarion valley practically to himself.

Such a situation wasn't as outlandish as it may sound. For, as an Indian, Jack Snow was something special. Within the meshwork of his own tribe he was somewhat of a devil-may-care renegade who had little respect for the authority of the appointed chieftans. A strong warrior and a proven hunter, he had little need to look up to anyone; and being blessed with an overwhelming self confidence, he never did. And although it was the duty and privilege of the tribal leaders to organize and authorize all hunting parties, appointing a leader, it never occurred to Snow to wait for their directives. Rather than that, he would gather together a group of his friends, and with their squaws and papooses trailing behind, be off on a jaunt that might last for several months. The stalwart Indian and his band of roving hunters were a common sight to settlers throughout all of the immediate Indian country.

But it was the Clarion valley that saw the most of Snow and his followers. From the mouth of the river,

where the Clarion flows into the Allegheny, all the way to the spring fed headwaters of either the east or west branch, these migrating Redskins would make camp and hunt for a time. Then, following the Indian's custom of never staying long in one place, they would soon move either up or down the river to pitch another camp. In this manner, they would, within the course of a hunting trek, cover the entire length of the valley. And, if the party was a large one, might even double back to re-hunt the territory. Seemingly, it was Snow's custom to hunt the lower valley during the warmer months, then move on to the high plateaus above the headwaters for deer and elk when the snows of winter aided in tracking these wide-ranging animals.

Among the Senecas, the hunting of larger game, such as bear and elk, was strictly an occupation for the braves. But the taking of the smaller species, ranging from rabbits to young deer, was a project that employed all of the members of the party, from

the aged warrior to the youngest children, and used all the implements at the hunter's command. In the earliest days, arrows, stone hatchets, clubs and crude stone throwers were the weapons of the hunt, but later, after the coming of the White Man, guns were used by those who were better equipped. Yet stone hatchets and clubs were still the weapons of the squaws and children of Snow's expeditions and many of the braves were still using the bentbow and flint-headed arrows.

So equipped, and dragging with them all of those items which made an Indian hunting party a sight to behold, Snow and his followers would move to a selected campsite. Then, while the squaws set up the camp, he and his friends would pass their idle time either playing Indian games or spear-fishing along the banks of the river. The preparation of the camp and the building of the racks on which the meat and hides would be dried could take several days. But when it was accomplished, and the Indian signs were found to be en-

SENECA INDIANS of the Allegheny Reservation still play the Snow-Snake, or Go-wa-sa, game ardently. A group of them, so employed, can be found at any time there is snow on the ground.







SHAKE-THE-BUSH HUNTING was of such importance to the Senecas that they used it as a basis of a ceremonial dance which is still performed at their religious festivals.

couraging, a day for the hunt would be set and the camp would take on a holiday spirit. And the dancing, to the chant of Seneca hunting dirges and the beating of water-drums, would gain in tempo as the time for the hunt approached. Finally, on the selected day and at the appointed hour, the whole group would trudge off into the forest to line up according to Snow's direction.

First, Snow would arrange his hunters in a huge circle with the space between each of them being quite wide at the start. Then, for an hour or two, they would remain unmovingly still in their places to allow any alarmed animals to again settle themselves. When Snow felt that this had been accomplished, he would signal, and the hunters would start moving forward, drawing the circle together by converging towards its center.

It has been said that the Indian

laughed at the White Man for building a fire so big he couldn't get close to it. Instead, the Indian built a small fire and hovered over it, thus being more fully warmed—not roasted in front and frozen behind. If this was the case, then the Seneca's way of driving his game into his death trap was just as different from the White Man's way of driving game as was the building of his fire. For slowly and methodically, with the least human noise possible, the Indian moved towards the center of the circle doing nothing more than vigorously shaking the bushes as he went. In this manner, he raised the game and moved it ahead of him, but as the animal was only slightly alarmed it moved neither too fast nor too far ahead of the hunter. This was important to the Seneca. For with his short-ranged weapons it was necessary that he get close to his quarry before frightening it into full flight.

As the circle closed, with the hunters drawing closer and closer together, the game from a wide area was concentrated and moved towards its center. And it was not until this circle was fairly well closed, most likely when animals coming from one direction met others coming from the opposite, that the game was finally frightened and put to full flight. But by this time, though, the hunters had closed in to where they could dash into the midst of the milling animals and slaughter them with their crude instruments. This was the Seneca's way of hunting game and there is little doubt that their kills were considerable in a country as prolific as the Clarion valley was in the days of Jack Snow.

When the hunt was over all hands would help in the gathering of the fallen game, most of which, although critically injured, still had to be finished off with a knife or a blow from a stone hatchet. Then drags were shaped from saplings and the carcasses carted back to camp. Here, the squaws and young girls would take over to skin the game and prepare the meat for the drying racks,

SENECA BONE AND STONE UTENSILS included the hatchet heads shown here. Securely bound between two sticks, which served as the handle, they made a deadly close-range weapon in the hands of an experienced brave.



while Snow and his friends would go back to playing the Indian games or fishing in the river. And this would be the course of their life until the skins were dried and the meat cured, then it would be decided whether to stage another hunt on the same ground, or move to a new location. Usually this was a matter of little consequence to the party, but with the Indian's inborn desire to be on the move it was almost always a case of them striking out for a new campsite.

So successful was the Seneca's method of driving game into a circle where it could be easily killed that, with the settlement of the country, it became highly popular with the white man and for a time "circle hunts" were the rage of the day. The rifle-equipped settlers were in a far better position to kill than the crudely weaponed Indian had been, so the amount of game slaughtered by this method reached fantastic proportions. For a time, it was a highly popular sport. But eventually, because of the volume of close-in shooting, the number of wounded hunters reached alarming numbers and it was soon impossible to find enough hunters who would chance the game. Due to this, the sport died a natural death. Yet many "circle hunts" were organized and conducted throughout the Clarion valley in the early days and there is little doubt that they accounted for large takes of game.

But whether or not Jack Snow's "circle hunts" brought him and his followers anywhere near the amount of game they later brought the white settlers, they were still productive enough to keep him and his parties well fed and highly successful by Indian standards. And while he and his nomad tribe moved up and down the Clarion valley their camps were happy camps and the papooses were round-bellied from the succulent meat of their trophies. Life along the Clarion river, which other Indians



had reason to call "The River of Hate," was good for Jack Snow and if he later went to the Happy Hunting Grounds of his Seneca forefathers it is hardly likely the game there was any more abundant than it had been in the controversial valley. His secret of the powerful medicine which caused the Delawares to fear him is gone with him, too, but perhaps he still finds use for it in that mythical land of Indian plenty which, according to Seneca legend, lays on the far shore of the

widest of rivers.

As I have said, the valley of the Clarion river is not the wildest, nor the most remote, of the areas available to the Pennsylvania hunter. No, there are others more wild, and more remote. But the average hunter would have to travel many, many miles to tread on ground that has been inhabited by a character more colorful, more genuinely interesting, than this valley where once lived the great Indian hunter, Jack Snow.

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### GIVE WILDLIFE AN EDGE

Many edge, or "border" cuttings have been made on State Game Lands and other properties under the control of the Pennsylvania Game Commission. In the following Dr. J. P. Linduska, Director of Wildlife Management for Remington Arms Company, explains how the practice is beneficial to wildlife.

Says the wildlife management specialist, "When you go hunting for cottontails, do you put your beagle down in the center of a cornfield or in the middle of a dense woods? Certainly not! You work the hedgerows, brushpiles and woodland borders. The same thing with quail and pheasants. For everyone of these birds you find, out in the center of a field, you'll find a dozen in the field border, on ditch banks and at the edge of the thickets.

And, of course, the real give-away on where game hangs out is to watch a bird dog with a couple seasons of savvy behind him. He'll not putter around in the big uniform places. You'll find him skirting the *edge* of the field, the *edge* of the thickets, the *edge* of the orchard, and all the other edges where different types of vegetation meet.

It's no mystery why game inhabits these edge situations. That's where they find, in close proximity, all the

things necessary for a good life—like at the juncture of woodlands and cropfields. The center of a picked cornfield offers feed aplenty, and occasionally the birds will wander out. And the center of a woods will offer protection, and now and again they will wander in. But the advantages of both habitats can be found at the edge, and that's where game will spend most of their time. It's a matter of safety and logistics.

"Translating the principal (roughly!) to the affairs of humans," says Dr. Linduska, "we enjoy the ultimate in 'edge' by having the kitchen, bedroom, bath and nursery all under one roof. It makes for more comfort, better survival and denser numbers than if we had all our kitchens in one part of town and all our bedrooms in another.

In other words, be it a game species or other types of animal life, it's not enough simply to have lots of food and cover. Unless they are properly distributed, one in relationship to the other, the amount of wildlife an area will support will be limited well below its real potential. That's why (other things being equal) ten one-acre ponds will produce more ducks than one ten-acre pond. It's a large part of the reason, too, why the small patch farms of yore, were more productive of game than the big consolidated farms of today.



# Tree Farming Penn's Woods

By Harold D. Ellis

District Manager, American Forest Products Industries, Inc.

**P**ENNSYLVANIA, where the first recorded attempt at forest conservation on the North American continent was made two and three quarter centuries ago, today is setting the pace in the wise use of forest resources as the leading Tree Farm state in the Northeast.

About all that came of William Penn's plan to maintain one acre in trees for every five acres cleared was the name Pennsylvania, or Penn's Woods. His plan just didn't have a chance because what is now the Keystone State—like much of the whole continent—had more trees than its people could possibly use.

Today the picture is different. We now have the economic justification for growing trees as a crop, and that's just what ever-increasing numbers of Pennsylvania forest landowners are doing as members of the American Tree Farm System.

If William Penn could come back to his beloved woods and take a trip around the colony he started in 1681, probably one of the first things he'd inquire about would be the Tree Farm signs along Pennsylvania highways and byways. He'd nod in appreciative understanding, too, when it was explained that Tree Farm signs mark well-managed woodlands dedicated by their owners to the continuing growth of trees for man's use. For, in essence, today's Tree Farms are probably what Penn had in mind when he wanted to set aside one acre in woods out of every five.

The basic objective of the American Tree Farm System is to encourage the practice of more forest management—more growing of trees as a crop—by giving public recognition to landowners who are doing a good job of forestry.

The movement was born in 1941



when the nation's first Tree Farm, the 120,000 Clemons Tree Farm near Montesano, Wash., was dedicated. The name "Tree Farm" was the happy choice of a country newspaper editor as a simple, understandable term to convey to the public the concept of growing timber as a renewable crop. It clearly expressed the principle of conservation through wise use.

From this beginning, the program has grown steadily until it now includes more than 14,000 Tree Farms embracing over 48 million acres of timberland in 46 states. Wood on this tremendous area—more than one and half times the entire land area of Pennsylvania—is estimated to be growing two to three times faster than on unmanaged forest lands.

The program was inaugurated in Pennsylvania in 1947 when the Glatco Tree Farm, operated by the Glatfelter Pulp Wood Company in Adams County, was dedicated as the state's first certified Tree Farm. Now Penn-

sylvania has 460 Tree Farms comprised of 257,905 acres of well-managed forest land. The closest rival for Tree Farm leadership in the Northeast is Maine with 246,730 acres on 248 units.

While production of better quality and more wood crops is the basic aim on Tree Farms, the program has its benefits for the sportsman. Wildlife and timber crops grow best together if trees are harvested on a planned scientific basis rather than being carelessly cut or allowed to stand and rot to death at an overmature age. Proper timber harvests benefit wildlife by providing browse for deer and other grazing animals while retaining ample timber stands to regulate stream flow and to provide game cover.

A Tree Farm is defined as an area of privately-owned, tax-paying forest land dedicated by its owner to the growing and harvesting of repeated wood crops. Basic nationwide standards, modified by states to fit local

**HARVESTING MATURE TREES** is good practice in tree farming. Here a mature yellow poplar is felled on an Adams County Tree Farm owned and operated by the Glatfelter Pulpwood Company of Spring Grove.



conditions, have been set by the trustees of American Forest Products Industries, Inc., national sponsor of the Tree Farm program. The general requirements to become a certified tree farmer are the protection of woodlands from fire, insects and disease while carrying on a planned program of regular timber harvests.

The Keystone State program is sponsored by the Pennsylvania Forest Industries Committee, representing major wood dependent industries of the Commonwealth and headed by George Patterson of the Patterson Lumber Company, Inc., Wellsboro. Cooperating closely and fully with the committee are the Department of Forests and Waters and the Pennsylvania Forestry Association. Other conservation agencies also support the program.

Actual operation of the program is in the hands of the Pennsylvania Tree Farm Committee of ten technical foresters representing the interested groups. Chairman is N. C. Tuttle, forester for the Hammermill

SAWLOG PRODUCTION is one of the major pay-offs in tree farming. Here Gerard Krumenacker, of Carrolltown, scales a truckload of hard maple logs harvested from a nearby Tree Farm. This log was estimated to contain 240 board feet of lumber.

Paper Co., Erie. Tree Farm certification is granted by this group upon consideration of a detailed inspection report on the landowner's property. For information on becoming a certified tree farmer, timber owners may contact any graduate forester or send in the application on this page to the Secretary, Pennsylvania Tree Farm Committee, 321 Dauphin Building, Harrisburg, Pa.

Upon receipt of an application for Tree Farm membership, an inspection of the property is made free of charge by a graduate forester, who may be employed by the state or industry or may be self-employed. If the land appears qualified, or even if it is in the doubtful classification, the forester submits an inspection report to the Tree Farm Committee which periodically considers reports at open meetings. If the land obviously is not qualified, the inspecting forester will tell the landowner what steps he must take to become eligible.

When an inspection report has been approved by the Tree Farm Committee, the landowner receives a certificate and Tree Farm sign to display as his badges of good forest management. Often these are publicly presented to heighten the honor. He also gets a free subscription to the quarterly AFPI publication, "The American Tree Farmer" magazine.

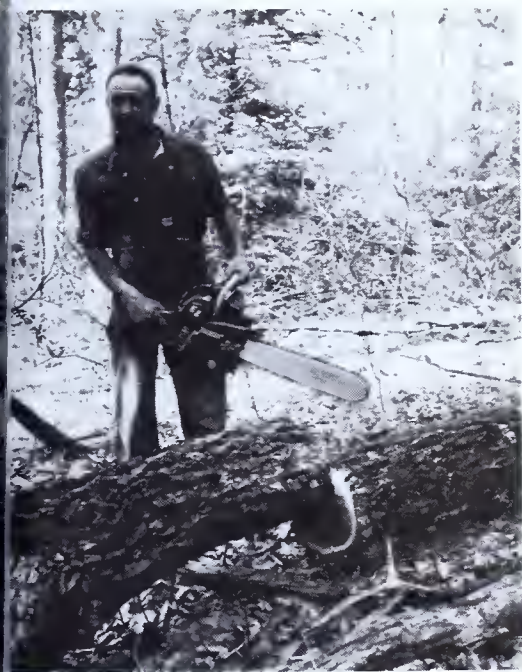
The pride and profit of tree farming Penn's Woods has attracted a wide variety of tax-paying ownerships—paper and lumber companies, oil companies, farmers, lawyers, doctors, shop workers, foresters, hunting clubs, resort hotels and even one operated by a Kiwanis Club to provide income for their Memorial Fund. But whatever the classification, they all share appreciation of the concept of trees as a crop.

Let's take a look at some of these Tree Farms.

Wilbur L. Dodd of Pine Grove Mills jumped at the opportunity to







TREE FARMER Doyle V. Heltman of Mill Hill looks for next cut after bucking felled oak into saw log lengths.

purchase 441 acres of woodland not far from his home because he is an ardent hunter. His only thought at the time was to have his own land for hunting, but he soon had the "pleasant surprise" that he could sell enough pulpwood to pay the taxes and provide additional money for improving the game habitat. The tract, a certified Tree Farm, is operated under a management plan prepared by Nittany Timberlands, Inc., consulting foresters of State College.

N. O. Pittenger of Nottingham has planted more than 120,000 trees since 1927, but his forestry work has gone way beyond just reforestation. Woods roads are carefully maintained for firebreaks, plantations are thinned and pruned and selective cuts have been periodically made in both plantations and natural woodlands. Mr. Pittenger regards his Tree Farm as a very sound economic venture. He says he has received satisfactory income from products harvested and still has a forest "which will make a better inheritance than life insurance."

Donald C. Leer of York Springs, an agricultural graduate of Penn State University, credits Tree Farm management of his woods as being a big factor in enabling him to make a success of farming after starting on a shoe string. He received \$2,000 for a selective harvest of sawtimber which left his woods in better condition than it was before cutting. He also saves several hundred dollars a year by heating his home with wood cutting from the Tree Farm and has made periodic pulpwood sales.

Ernest E. Schmiedel of Ridgway figures he averages about \$300 a year extra income in tree farming his 66 acres of woodland. He regards the extra income as just that much gravy because he is improving his woods, he is utilizing equipment in slack periods and because he just plain enjoys working in the woods. "Everytime I get a couple of hours, I go into the woods—it's just like a vacation," he says.

These are a few of the success stories of Pennsylvania tree farmers.

FOREST PRODUCTS MARKETS play a key role in tree farming. One market available to many Pennsylvania landowners is the pulpwood market which offers an opportunity to sell smaller material. Here a load of hardwood pulpwood is checked into yard of pulp mill at Johnsonburg.





TREE FARM SIGN is the mark of good citizenship being posted by Tree Farmer Hugh W. Alger, of Towanda.

Many more could be told. Whatever their reason and whatever their motive, tree farmers are serving themselves and serving the country by growing wood and providing all the other benefits of managed forest lands.

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MAIL TO:

Secretary  
 Pennsylvania Tree Farm Committee  
 321 Dauphin Building  
 Harrisburg, Pa.

- (    ) I would like to receive advice and assistance in developing my woodland as a Tree Farm.
- (    ) I am protecting my woodland from fire, insects, disease and destructive grazing.
- (    ) I am harvesting trees in a manner that assures continuing production of timber crops.
- (    ) I am planting trees on idle acres.

Name ..... Forest Acreage .....

Address ..... County .....

Location of woodland .....

.....



# SCOUTS 'n PHEASANTS

By John F. Clark

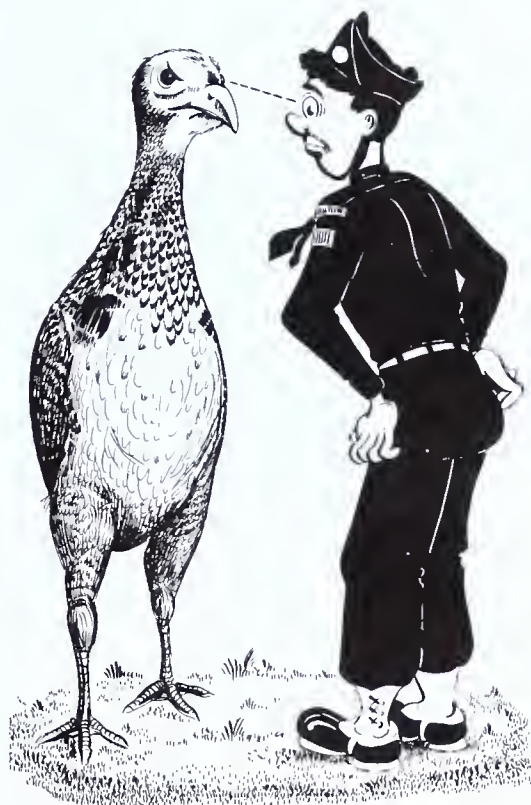
(Photos by the writer)

**E**XPLORER Post 53 and Scout Troop 53 of Salladasburg, Pa., have been organized now for about three years. In that time they have participated in quite a number of conservation projects: Building bird and game feeders, setting up and servicing game feeding stations during the winter months, Hunter Safety programs etc. But the idea of raising 300 pheasants was a horse of an entirely different color.

It all began on a cold Sunday afternoon in March when Frank Bren, a Director of the Lycoming Consolidated Sportsmen, called on me.

"How would your Scout groups like to raise some pheasants for the Consolidated Sportsmen?"

One thing you can say about Frank, he doesn't beat around the bush! Anyhow, we discussed the whole idea pretty thoroughly and he gave me the low down on what the project would consist of. We would receive 300, day old pheasants sometime in May or June, and raise them for about six weeks. The Game Commission would supply the birds and the feed while Consolidated would supply wire, etc. to fix up a brooder house. It would be the Scouts' job to keep the pheasants supplied with feed, water and anything else that they might need. After six weeks in our care the birds would be returned to the Consolidated Sportsmen to be debeaked and turned out into the



large holding pens along Loyalsock Creek. They would be kept here until Fall, at which time they would be returned to us to release in this area.

Frank also informed me that he had talked to J. J. Cohick, a local storekeeper, and that Mr. Cohick had promised the use of a vacant chicken pen, electric brooder, water fountains, feeding trays and electricity.

The whole idea sounded pretty good, but naturally I couldn't commit the Scouts until they'd had time to talk it over.

After Frank left I called Bill Sellinger, Explorer Advisor of Post 53, and gave him the story. We agreed to wait until our next weekly meeting to present the project to the boys.

Needless to say, the Scouts were enthusiastic about the idea, and it wasn't long till everyone had agreed to take on the job. It was decided that the care and feeding of the birds would be the responsibility of the



**CLEARING AWAY** trash and debris was the first step this conservation project for Scouts.

Explorers, and the Boy Scouts would help them wherever necessary. With the help of some booklets on pheasant raising supplied by Michael Evancho (Game Protector in this area), Bill briefed the boys on what their specific jobs would be.

The next four or five weekends were busy ones indeed. The brooder house was cleaned out and disinfected. Then wood chips were hauled in from a local sawmill. Because the chips had quite a bit of sawdust mixed in they had to be screened through a  $\frac{1}{4}$ " mesh. After spreading the chips evenly over the floor, the brooder was set in and tested. Next the boys went to work on the outside, erecting a completely enclosed yard. It was quite a chore putting up the overhead wire, but with the help of some of the Scouts' parents the job was finally completed. In the meantime the feed had arrived and was placed in the feed bin.

On May 25th Mike Evancho called and said that the birds would be delivered the next day. Since most of the Scouts were still in school, Bill Sellinger, Bill Harvey (Assistant Advisor), Mike and myself were on hand to receive the new born pheasants. The actual count was 309 birds. After school was out the Scouts showed up to get a good look at their charges.

For the first four or five days the birds were kept close to the brooder by a foot high cardboard fence. Working from a duty roster, prepared in advance, the Explorers fed and watered the chicks twice a day. A close watch was kept of the temperature which was maintained as close to 102 degrees as possible.

After a week of close confinement, the fence was removed and the birds had the full run of the house. Up to this time we had only lost one or two birds; then one night disaster struck. Due to a faulty thermostat the temperature dropped to 75 degrees, causing the birds to huddle. The next morning Dave Hillyard found twenty dead pheasants that had been smothered and trampled. The thermostat was quickly repaired and from then on there was no more crowding. As the weeks progressed and the birds began to feather out, the temperature was gradually lowered. According to the instruction booklet the birds should have been turned out into the yard about the second week. However, because of unseasonably cold and wet weather, we didn't open the doors until the fourth week. Because of this prolonged and close confinement some picking did occur. This was partly

**BUILDING PENS** was the next step. Explorers and Scouts worked four or five weekends in these preparatory stages before the day-old pheasant chicks were delivered.







SIX-WEEK-OLD RINGNECKS were the result of care given by Salladasburg Scouts. In mid-July everyone turned out to crate the birds for transfer to holding pens of the Lycoming County Consolidated Sportsmen. Of 309 day-old chicks, the Scouts successfully raised 264 healthy birds.

eliminated by covering the windows with cardboard. We also used an antipick remedy that worked very well. (Especially after the birds were let out in the yard.)

As the pheasants filled out we had to get larger feed trays and water fountains. It kept the boys busy keeping them filled. The feed consisted of starter mash for the first three or four weeks and pellets from then on. The Scouts added weeds and grass for a change in diet.

Finally, on the morning of July 16th, everyone turned out to crate the birds for the trip to the Sportsman's grounds on Loyalsock Creek. Out of 309 we returned 264 healthy birds. At the pens the pheasants were debeaked and turned out into the large holding pens.

As hunters and future hunters these Scouts had been given the opportunity to observe first hand some

of the problems that go with raising game birds. The whole project was an enjoyable and educational experience for the boys. (And adults.) It's a safe bet that the next time one of the Scouts lines his sights on a pheasant he'll be thinking, "Doggone, I'll bet that's one I helped raise."

Scouts and leaders who participated in the project were: Explorers—David Hillyard, Ronald Cohick, Gary Young, William Sellinger, Gordon Confair, Gary Heyd, Thomas Sellinger, Anthony D'Amato, Ken Feil. Boy Scouts—Dean Hillyard, Myron Miller, Michal Stahl, Millard Charles. Leaders—William Sellinger, William Harvey, John Clark, Lee Richards, William Miller. Game Protectors Michael Evancho and Lester Harshbarger. Sportsman Directors—Frank Bren, Paul Corson, J. J. Cohick.



### Feeder Forecasters

**FULTON COUNTY**—It was of interest to me to note the self-reliant nature of the wild turkey during the past winter. During the period when the woods were ice-bound; the turkeys camped at the feeders. When it was again possible for them to scratch for themselves, they visited the feeders rarely. As the scratching becomes less and less productive, they are forced to lean more heavily on the feeders.—District Game Protector Carl Jarrett, McConnellsburg.

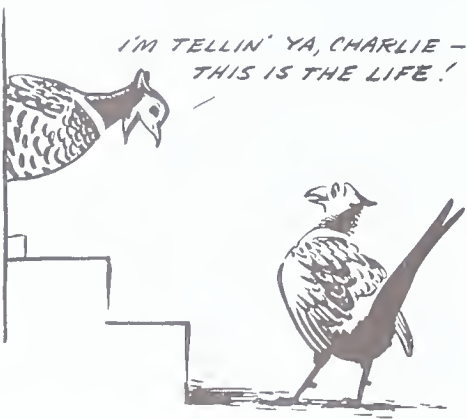
### Friendly Fellow

**BUTLER COUNTY**—Gene Isaly, a sportsman from Evans City, Butler County, asked me to drop in one day when I happened to be near there. This I did and he said he had something to show me. While sitting in the auto Gene got out and started to call, "Oscar." Soon a big male ringneck pheasant came running out and sat there. He reached down and petted it, picked up the bird and set it down. Then it followed him all around the yard. Next he tapped the hood of the auto and "Oscar" flew up and sat there. Now Gene said, "Watch this." Then he opened the door of his home and said, "Come on

Oscar," and just as big as life the bird followed him in. Gene related many other things that the bird has done, including watching television for hours on his lap. The bird came in from the wild as an adult and just took to Gene.—District Game Protector Paul Miller, Butler.

### Honored Guest

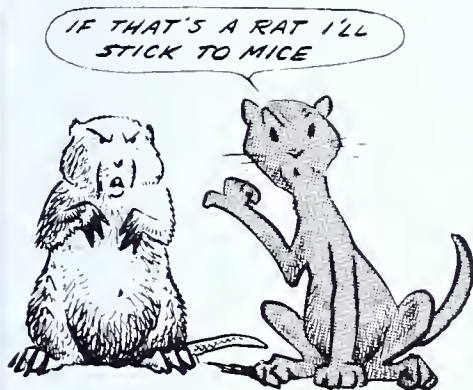
**DELAWARE COUNTY**—On February 21, 1959, at a banquet held by the Northern Chester County Sportsmen's Clubs, I was honored by being presented a beautiful engraved plaque reading as follows: "Awarded to EDWARD J. FASCHING in recognition for his outstanding work in conservation as game protector, by the Sportsmen of Chester County." I was taken by surprise, and at a complete loss of words for a time, and I can only say that words cannot express the joy I have received from being presented with this plaque, for to me it means more than a personal award. It means a cemented friendship between the sportsmen, the game commission and its link, the game protector. I shall always treasure this award.—District Game Protector E. J. Fasching, Downingtown.



### Lucky Number

**YORK COUNTY**—At a recent Sportsmen's Meeting, Glenn Hipple, R. D. #1, Elizabethtown, told me he can no longer be superstitious. His 1958-59 hunting license is F 13133. The last day he planned to hunt deer, (first Saturday in December), he killed his 13th buck. His camp is located in Cameron County.—District Game Protector D. H. Fackler, Windsor.





### Rats 'n Cats

ADAMS COUNTY—We are all too familiar with the situation relative to the increase in muskrat numbers and the damages which have occurred to Farm Ponds and even to field crops and lawns by these animals. Now it appears that they have changed their habits in gaining their feed. Mr. James Reichert had put some scraps out in the yard for the cats and while watching out of the kitchen window, was surprised to see a muskrat come up in the yard and join the cats at their evening meal of table scraps. The "rat" did not seem to be afraid of the cats, but joined right in and helped himself to the food.—District Game Protector Paul Glenny, Gettysburg.

### Commuter Special

YORK COUNTY—The first day of the 1958 antlered deer season, a gentleman from Hanover recruited the services of the Hanover Taxi Cab Company to transport him to his designated hunting territory, a State Game Propagation Area. He instructed the cab driver to return at 9:00 a. m. to pick him up. Shortly after the 7:00 a. m. opening hour, he bagged a fine buck deer adjacent to the Propagation Area. The hunter had to wait approximately one hour and forty-five minutes for his cab to return to pick him and his deer up.—District Game Protector G. D. Kirkpatrick, York.

### Winged Missiles

FAYETTE COUNTY—During February, 1959, two of my immediate neighbors got their first hand look at some wildlife oddities. One experienced a Cooper's Hawk that crashed through his front bay window, flying through two rooms in his house knocking everything down that got into his way, including knick-knacks to milk bottles. The lady of the house didn't know what to do but open the door for the hawk to leave. The hawk obliged. Another, who maintained a feeding station in front yard for songbirds saw a Cooper's Hawk, believed to be the same one that crashed through a window two days earlier, saw one of the songbirds snatched from the feeder for an afternoon snack.—District Game Protector A. J. Ziros, Connellsville.

### Working On The Railroad

ERIE COUNTY—It is curious to note how animals adapt themselves to strange conditions. A pair of beavers made their home in a den they hollowed out in a grade of the Pennsylvania Railroad near Erie. They spent most of the winter in this den, which is not directly under the tracks but only about 5 feet from the rails on the main line. The noisy traffic of freight and passenger trains in no way discouraged them.—District Game Protector Elmer Simpson, Union City.

TIME TO GET UP - THE 6:22  
JUST WENT BY!





### All In A Night's Sleep

**LUZERNE COUNTY**—While having a good night's sleep after a few long days of work, at 3 a. m. I was awakened by the phone ringing. Half asleep, I heard a friend's voice coming from a phone booth in a neighboring county asking whether I could answer a question for him. He told me that he was stopped on a road check and fined \$25.00 for transporting a deer not properly tagged, also making some other statements about the officers that picked him up. I explained the law to the hunter which made it clear to him why he had to pay a fine and he said that now he could sleep good.—District Game Protector Edward Gdosky, Harveys Lake.

### All's Not Gold

**MONTGOMERY COUNTY**—While attending a recent meeting of the Perkiomen Valley Sportsmen Association in Collegeville, one of the officers of the club related two unusual incidents that happened to him and his brother during the past muskrat trapping season. One morning his brother was checking his traps along the Perkiomen Creek near Collegeville when he came upon a muskrat in one of his traps. The muskrat was still alive and as he got into the water to kill it and take it out of the trap, it drew back its lips and snarled at him showing his teeth as it got ready to fight the new intruder. What set the trapper back on his heels was the fact that the muskrat looked like he just came from the

dentist and had some fancy bridge work done on its front tooth. He killed the muskrat, examined it and found that at one time the animal picked up an empty .22 cal. copper bullet casing and it slipped over the one tooth and would not come off. This animal must have looked pretty sharp sporting his new gold bridge work around the river. The other incident that took place was the finding of an opossum hanging dead from a small tree in the woods. Upon investigating it, they found that the opossum climbed the tree and as they sometimes wrap their tail around a limb to hang onto, this particular opossum's tail got caught, wedged tightly where two branches formed and as it struggled to get loose, it became tighter and the animal finally starved to death.—District Game Protector, W. E. Shaver, Mainland.

### Risky Red

**BLAIR COUNTY**—Recently while traveling along Federal Highway 22 between Water Street and Hollidaysburg I noticed a Red Squirrel setting up in the middle of the road. I straddled him in order not to hit him, and as I passed I looked in the rear view mirror and saw that he was still setting in the middle of the road and hadn't even stopped eating the nut which he was holding in his front paws. Guess that he was either awful hungry or just plain contemptable.—District Game Protector Russell Meyer, Altoona.





### Peek-a-boo

**BUCKS COUNTY**—Deputy Harry Woodington tells us one that some of the skeptics might find difficult to believe. But knowing and loving Harry as we do, there is no doubt that the following story is no farther from the truth than any other item appearing in this section.

It seems that Norman Waldman, a neighbor of Mr. Woodington, had observed a grey fox remove the cover and feed from his garbage pail on several occasions. This is a very brazen and unfoxlike occupation, especially since the pail is only a few inches from the kitchen door.

A few nights ago, Mr. Waldman left the kitchen door open so that he might observe the animal more closely. Well, sir, this worked real well. The fox came right up and peered into the kitchen to watch Mr. Waldman. Not caring for being outdone at his own game, Mr. Waldman kayoed the grey with a hand ball-peen hammer.—District Game Protector W. J. Lockett, Doylestown.

### No Bull

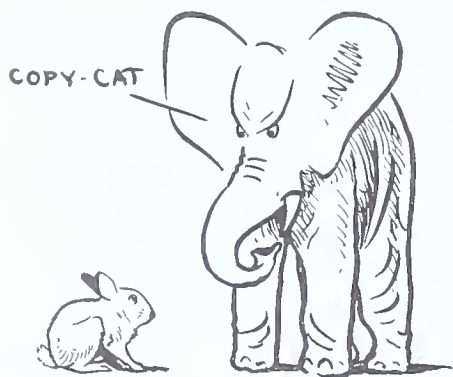
**CHESTER COUNTY**—One of the rabbit trappers in this area, Deputy William Welsch, Parkesburg, reported an unusual request from a landowner where he was trapping rabbits. The owner requested that one of the rabbit traps be moved to a new location for reason a toy bull terrier pup was getting into the trap and eating the apple which was placed in the trap for bait for rabbits. He thought that perhaps the pup might possibly get into the trap sometime when no one was about and suffer injury or from exposure. While I have had reports of catching possums, rats, skunks, and various other small animals and birds, this is the first time I have heard of dog being caught in the trap.—District Game Protector P. J. Filkosky, Parkesburg.

### Hold 'Em Cowboy

**WAYNE COUNTY**—Mr. Langdon who lives in Manchester Township called one day and asked how to get rid of a rip-snorting deer. It seems that he and another fellow had seen this deer go through the ice on the Delaware River. It finally limped to shore but collapsed. When the two men reached the buck, it appeared to have died. They put a rope around his neck and dragged him to the shed, then tried to call me. Not making a connection, they waited outside and heard a commotion coming from the shed. Sure enough the buck had returned to life, making a wreck of Mr. Langdon's shed. He called again and explained the situation and I told him to open the door and let the deer out. Mr. Langdon thought for a moment then asked how to go about getting twenty feet of rope from around the buck's head.—District Game Protector Fredrick G. Weigelt, Honesdale.

### While The Dog's Away . . .

**BUTLER COUNTY**—During the months of January and February, I had much trouble in my district of dogs running and killing deer. One day during the latter part of February I was called to investigate a dead deer in the Slippery Rock Creek. When I arrived at the scene I noticed the creek was frozen with the exception of about eight feet in the center. Closer observation showed where dogs had run the deer into the creek. Several dogs got on both sides of the banks and held the struggling deer in the creek until finally the deer gave up from exhaustion and then drowned. Another example of owners saying, "My dogs won't run deer and other game." They don't know what "Rover" is doing when he is away from home all night.—District Game Protector Woodrow E. Portzline, Slippery Rock.



### Easter Bunny?

**ALLEGHENY COUNTY**—Deputy E. A. Smith of Wilkinsburg trapped a very unusual rabbit the morning of February 5, 1959. When checking his rabbit traps this morning he pulled out a rabbit which he thought was someone's tame pet. A closer look convinced him that it was a wild cottontail. Instead of the gray and tan fur of the normal cottontail, this one had a soft baby pink coat. Instead of dark brown eyes it had pink eyes. It turned out to be a pink Albino rabbit. The rabbit was turned over to the Carnegie Museum in Pittsburgh, Pa.—Acting Game Protector J. W. Way, Pittsburgh.

### Pandora's Box

**LEHIGH COUNTY**—One of the men in the rabbit and pheasant trapping program came to me with one of his pheasant traps in which crouched a small and frightened dog—a Beagle hound. He said that in looking over his traps that morning, he found this trap with the dog and a dead pheasant hen inside and on the outside, watching all with much interest, sat a large cat. Probably waiting for the dog to find a way out so it could feast on the remains. It took a little time to find a way out, but I finally managed to get the dog out of the trap and to locate its owner—W. A. Moyer, District Game Protector, Allentown.

### Avid Archers

**VENANGO COUNTY**—The interest that has been building up in archery was demonstrated this month at a local school. I was contacted about presenting a film on archery at the Victory Joint School in the lower part of the county. They also wanted someone to shoot the bow, talk on bows, arrows, targets and ranges. As we have never had any instruction on this recently expanded sport, I did not feel qualified to complete this part. Therefore I obtained two men from the Rainbow Archery Club. They took time off from their work and used their own equipment. They had an outdoor club at the school and about 160 attended. It went over so good they asked us to come back and present it for the Junior High group. We did this the following week and had about 175 present. Many questions were asked and answered and I believe it created more interest in the sport.—District Game Protector Clyde W. Decker, Franklin.

### Gone Gull

**NORTHAMPTON COUNTY**—On about February 11 or 12, of this year, a Sea Gull wandered inland to Wind Gap which is probably 60 or 70 miles from the nearest shore and made a crash landing in the street in that town killing itself instantly. During a heavy fog and drizzle the gull probably mistook the lighted streets for water and made an abrupt landing in front of the police cruiser car. Chief Reinhart picked the gull up and brought it to me since it had a Fish and Wildlife band on it. As yet the place it was trapped and tagged has not been determined.—District Game Protector H. W. Wiggins, Nazareth.







# Modern Annie Oakleys

By George Cottrell

**WE HEAR** a lot about the top Father and Son shooting teams, the Brother and Brother teams, etc., but no one ever makes mention of the Mother and Daughter teams. Perhaps that's because there has never been such a team. Well if that's true, let it now be said that such a condition is over: We have a pretty fair Mother and Daughter trapshooting team in Philadelphia. May we introduce Mrs. Fred D. Ogilby and her daughter, Margaret, of Rydal, Pa. Incidentally, they like to be called Hilda and Peggy.

Mrs. Ogilby started shooting back in 1951 because Fred was an ardent sportsman and loved trapshooting. As most trapshooting is done over the week-end, Hilda discovered early that it might be a splendid idea to take the game up and go along to these tournaments. Hilda since early childhood had been a concert pianist which is a far cry from shooting a shotgun at clay targets; however, she showed a quick adeptness for the

game and before long was breaking a very commendable score. In fact she won her club, Huntingdon Valley Country Club, championship that same year, breaking the first 50 x 50 perfect score she ever shot. She also won the Tri-State League Ladies' Championship that first year.

Incidentally, Fred won that shoot with a perfect 100 x 100, so you can see, this could easily be about the shooting Ogilbys.

This would be a splendid time to explain that Fred, while a top flight shooter and winner of many championships still is prouder of his wife's and daughter's accomplishments than he is of his own. The executives of the Philco Corporation, where he is Vice-President, enjoy many game dinners because of his love for shooting.

But back to the Mother and Daughter combination: It was in 1953 that the daughter became interested and at the age of 12, Peggy started shooting the big 12 gauge



**JUNIOR CHAMPIONS** wish each other good luck before their shoot-off at the 1958 Eastern ATA Zone Tournament, Hamilton, Ontario. Harvey Boyle, of Elkton, Md., finally won over Peggy Ogilby in the shoot-off, 25 to 24.

shotgun. The gun was almost bigger than Peggy, but she also showed an early promise. She broke her first 50 x 50 at the Huntingdon Valley Country Club that year. In the meantime the mother, Hilda, won her class championship at the Sunny South Mid-Winter Shoot at Miami as well as the Ladies Championship at Quaker City Gun Club in Philadelphia. Then in 1954 came Hilda's first major championship when she won the Ladies' event at the famous New York Athletic Club. She was tied with the former All-American, Martha Andrews of Spartansburg, South Carolina, as well as Mrs. Bess McKinley of Ohio, but won in the shoot-off. Hilda also won the Philadelphia Open Championship that same year.

In the meantime, Margaret was shooting, but as yet could not keep up with the fast pace being set by her mother. Another reason also was her love for horses. Believing that she should be active in other sports as well as shooting, her parents encouraged Margaret to enter into training for riding, golf and swimming. She has won many trophies in all of these sports, but riding was her first love

during these early years. Not only was she a championship rider, but she also became a first class trainer. Her father bought "Stardust", a green jumper, and Margaret trained him into a champion, taking more than 300 ribbons with this horse.

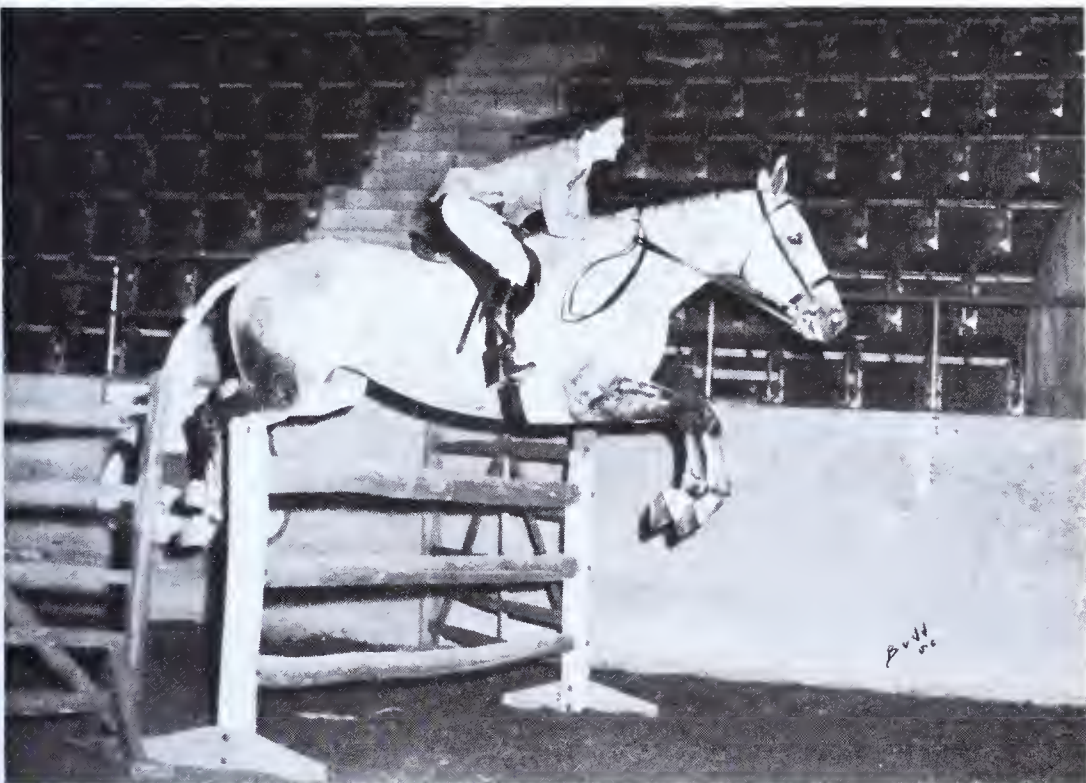
Still with all these other interests "Peggy" was still shooting and at the First Invitational Greenbrier Open Championship, White Sulphur Springs, Margaret won the Junior Championship while Hilda was winning the Ladies' event.

In 1956 these two began to create attention as the top Mother-Daughter duo when they tied for the Women's Championship event at the Eastern A.T.A. Zone Championships. The mother won in a thrilling shoot-off with her daughter, but not until after they had gone another 50 targets. Another interesting event took place that year. "Peggy" had just reached the age that she could drive a car and she asked her father for an auto. Fred told her, more to postpone the event than anything else, that he



**MOTHER-DAUGHTER TEAM** of Hilda and Peggy Ogilby has been shooting since 1953. Both have been consistent winners in trapshooting competition.





CHAMPIONSHIP RIDING FORM is displayed by Peggy Ogilby up on "Stardust." Horseback riding was her first love. She trained this jumper herself and went on to take more than 300 ribbons with him.

would give her a car when she broke her first 100 x 100 targets, or in other words, her first perfect 100 targets broken without a miss. "Peggy's" first chance to shoot a hundred targets was in the largest trapshooting event in the world, the Grand American at Vandalia, where more than 2,000 shooters participate. Most experienced shooters freeze up at this event and shoot very poorly, but Fred did not take into account the fighting instinct of his sports loving daughter. With that car as a prize and the challenge that it offered, she travelled down that long firing line, making a puff of smoke out of every target until at last that 100th "bird" disappeared into black dust and she had won her automobile.

This is typical of the determination of both mother and daughter.

In 1958 at the Pennsylvania State Championships neither of them knew what any one else had turned in as a score; they both were trying to beat each other. The race was over 200 targets and in the morning round of 100, Hilda had finished one target ahead of "Peggy". In the afternoon each was so determined to win that they each scored 99 x 100. That gave the State Championship to Hilda and the runner-up trophy as well as the Junior Championship to "Peggy".

Just a few months ago in Hamilton, Ontario, Peggy broke a 99 x 100 to tie for the Junior Eastern A.T.A. Zone Championship. That pretty well brings us up-to-date on the "Shooting Ogilbys", and if this duo is not the greatest Mother and Daughter team, they will fill in until some one else comes along.

# Bruce Lake Monument

By Thomas H. Knepp



**F**OR some thirty years after the Civil War northeastern Pennsylvania was the scene of tremendous lumbering operations. As a result the virgin forests disappeared, and thousands of acres of waste left by the loggers were consumed by raging fires. With the forests gone many of the people of the Pocono country had to find other sources of income. By the turn of the century farmers, as well as mountain people in isolated homes, found that hunters and fishermen were happy to find accommodations nearby to good trout streams and to woodlands.

During the first quarter of the twentieth century some of the farmers that had welcomed fishermen and hunters began to operate summer boarding houses for guests seeking relaxation in the bracing climate of the uplands in Monroe and Pike counties. Over the years some of these boarding houses developed into inns which catered to a larger and more diversified clientele.

As more and more people came to

the Poconos the Commonwealth started a program setting aside certain lands for recreational purposes, a program which is still being expanded.

One of the largest recreational areas is centered about Promised Land in Pike County, about eight miles south of Lake Wallenpaupack. Here in the Delaware State Forest is Promised Land State Park under the supervision of the Pennsylvania Department of Forests and Waters. Adjoining the park is a State Game Refuge administered by the Pennsylvania Game Commission. The third of these public lands is the Bruce Lake Monument, one of two wilderness areas in the Poconos. These monuments have been set aside as wildernesses so that the people of Pennsylvania may enjoy the out-of-doors undisturbed by the inroads of civilization.

Bruce Lake had its origin in glacial times; its forty-eight acres occupy a shallow cup-like basin which drains to the southwest into a branch of



Shohola Creek, a tributary of the upper Delaware. During dry seasons no water flows from the lake. The west shore is a floating bog with cranberries and pitcher plants, black spruce and tamarack. The north, east, and southern edges of the lake are rocky and wooded to the shore line. The outlet drains through an extensive swampy area occupied by tall grasses, some balsam, and stumps of long fallen trees. Sunfish, perch, pickerel, fallfish, and catfish inhabit the waters of the lake, while migratory birds find a refuge in the swampy outlet.

The Bruce Lake area has an elevation of 1700-1900 feet. Its flora is that native to upland plateau country. Evergreens such as pitch pine, white pine, hemlock, tamarack, black spruce, balsam fir, and American yew are found surrounding the lake. The principal hardwoods are oaks—white, red, chestnut, and scarlet; birches—black, yellow, and grey; tulip poplar, ash, aspen, basswood, wild cherry, and sassafras. Mountain laurel, rhododendron, blueberries, purple and white azalea are common. Bear, deer, mink, otter, weasel, fox, porcu-

pine, woodchuck, rabbit, and squirrel live in this extensive wilderness.

Most of the Bruce Lake Monument of 2300 acres was acquired in the early 1900's. It is under the control of the Pennsylvania Department of Forests and Waters. It is to exist in a natural state without benefit of man other than protection from fire. No wheeled vehicles are allowed, and access is by trail only. All camping and sport equipment must be carried about two and one-half miles from Pennsylvania Route 390. Camping is limited to forty-eight hours. About thirty miles of trails were constructed by the Civilian Conservation Corps between 1933-1940.

"A little more than a mile west of Bruce Lake is Egypt Meadows Lake, impounded by a dam constructed by the Civilian Conservation Corps. This lake has a surface area of 60 acres; there are 100 acres of swamp which provide a haven for wildlife. The lake contains the same species of fish as Bruce Lake." The entrance to Bruce Lake Monument is about one and one-half miles north of Promised Land State Park on Route 390.





# CONSERVATION NEWS



## Final Figures On 1958 Hunting Seasons Show Pennsylvania Hunters Had Good Year; Harvest Of Big Game Highest In a Decade

Almost 112,000 legal deer were taken in three separate seasons last year, according to reports filed by successful hunters. A complete and final count of the harvest, just released by the Game Commission, shows Keystone State deer hunters took 46,738 antlered bucks and 65,187 antlerless deer during the 1958 seasons. The buck kill was down slightly from the all-time record posted in 1957 when 49,254 legal antlered deer were harvested but the 1958 antlerless kill during the three-day season in December was 9,325 more than in 1957—65,187 as compared to 55,862. The combined totals of the three deer seasons last year represents the greatest harvest of whitetail deer since 1949 when 130,-

723 of these big game animals were taken.

Keystone State hunters reported a take of 439 legal black bears last year, greatest number since 1947 when 569 of these big game trophies were killed.

Potter County again led the state in the number of antlered deer reported killed with 2,007 bucks in 1958. Other counties registering an antlered deer harvest of 1,000 or more included Bedford, Bradford, Centre, Clearfield, Clinton, Elk, Forest, Huntingdon, Luzerne, Lycoming, McKean, Schuylkill, Somerset, Tioga, Warren and Wayne. The heaviest take of antlerless deer was in McKean County with 2,893. Other counties reporting 2,000 or more of



Photo by J. D. Mitchell

OPENING DAY SUCCESS in northwestern Pennsylvania brought smiles to the faces of these six deer hunters. All of these fine bucks were killed within sight of the outskirts of the city of Meadville, Crawford County.





Photo courtesy of Jim Hayes

**TROPHY BUCKS** from all over the state are being mounted by Ben Kraus, Jr., taxidermist of Bridgeville. Ben reports the 1958 season produced the largest number of big racks he's ever been called upon to handle.

these deer harvested were Centre, Elk, Forest, Lycoming, Potter, Schuylkill, Sullivan, and Warren. The antlerless deer harvest totalled 64,198 during the three-day season December 15-17 and resulted from the issuance of 350,700 Antlerless Deer Licenses.

One of the most surprising results of the 1958 big game seasons was the fact that bowhunters scored exactly the same kill as they did in 1957. The harvest was 1,358 in both years, despite considerable differences in seasons and numbers of hunters. In 1957 a total of 55,554 bowhunters were licensed to hunt in the early archery deer season from October 5-12. In 1958 the number of bowhunters increased to almost 73,000 for the 18 day, any-deer season last October. Their reports of deer killed were checked and re-checked by Commission statisticians but the final

count remained the same as in 1957.

Small game success varied last year. The rainy, cold spring of 1958 hurt the crop of game birds, while cottontail rabbits were not generally reported as numerous during the hunting seasons. Hunters had difficulty in locating wild turkeys because the birds were widely dispersed, natural foods being available in quantities over their best range. Rain, snow and high winds drove many hunters indoors early on the opening day of the general small game season. This situation considerably limited the first day's bag of ringneck pheasants, rabbits and wild turkeys. Usually a high percentage of the total season harvest of game birds and rabbits is registered on the opening days of the season. On the plus side, however, the 1958 bag of grouse, woodcock, doves and marsh birds was better than that of 1957.

PENNSYLVANIA GAME COMMISSION  
LEGAL BIG GAME KILL  
(Based on Tabulation of Game-Kill Reports)

COUNTIES	Deer— Legal Antlered		Deer— Legal Antlerless		Bears	
	1958	1957	1958	1957	1958	1957
1 Adams	288	378	283	302	....	....
2 Allegheny	94	103	105	55	....	....
3 Armstrong	546	472	523	319	....	....
4 Beaver	86	119	115	54	....	....
5 Bedford	1,020	969	1,188	654	....	3
6 Berks	576	626	1,076	659	....	....
7 Blair	948	664	826	351	....	2
8 Bradford	1,181	1,282	1,843	1,690	9	2
9 Bucks	230	274	295	343	....	....
10 Butler	508	464	787	387	....	....
11 Cambria	621	718	938	638	....	....
12 Cameron	845	572	979	616	31	34
13 Carbon	764	796	1,105	913	5	10
14 Centre	1,952	1,840	2,165	1,385	25	15
15 Chester	99	121	133	118	....	....
16 Clarion	754	799	746	618	4	8
17 Clearfield	1,572	1,201	1,284	792	11	9
18 Clinton	1,258	1,229	1,026	494	32	29
19 Columbia	558	564	920	785	1	....
20 Crawford	426	471	700	616	....	....
21 Cumberland	403	396	431	387	....	....
22 Dauphin	523	546	751	533	....	....
23 Delaware	10	9	11	16	....	....
24 Elk	1,483	1,658	2,738	2,808	39	21
25 Erie	200	281	240	440	....	....
26 Fayette	471	409	382	248	....	....
27 Forest	1,015	1,387	2,226	3,094	16	10
28 Franklin	748	792	940	624	....	....
29 Fulton	453	521	556	414	....	....
30 Greene	189	146	252	103	....	....
31 Huntingdon	1,773	1,438	1,534	973	1	1
32 Indiana	845	706	1,126	693	....	....
33 Jefferson	945	894	1,167	877	1	10
34 Juniata	599	306	538	461	....	....
35 Lackawanna	311	481	388	508	8	5
36 Lancaster	102	101	139	102	....	....
37 Lawrence	94	78	156	42	....	....
38 Lebanon	256	266	414	441	....	....
39 Lehigh	125	137	214	116	....	....
40 Luzerne	1,263	1,266	1,433	1,039	10	6
41 Lycoming	1,930	1,849	2,100	1,726	40	34
42 McKean	1,123	1,749	2,893	3,135	21	7
43 Mercer	210	180	303	132	....	....
44 Mifflin	655	570	648	455	4	2
45 Monroe	968	1,190	1,327	1,262	28	13
46 Montgomery	105	132	177	196	....	....
47 Montour	40	56	108	88	....	....
48 Northampton	164	193	216	180	....	....
49 Northumberland	266	269	412	418	....	....
50 Perry	885	946	1,063	823	....	....
51 Philadelphia	....	....	....	....	....	....
52 Pike	984	1,194	1,505	1,778	44	18
53 Potter	2,007	2,514	2,926	2,860	30	8
54 Schuylkill	1,463	1,387	2,298	1,798	....	....
55 Snyder	336	512	581	367	3	3
56 Somerset	1,167	1,491	1,906	1,572	....	1
57 Sullivan	990	1,229	2,025	1,922	7	5
58 Susquehanna	626	748	1,393	1,303	....	....
59 Tioga	1,249	1,382	1,791	1,715	41	12
60 Union	394	352	554	436	5	10
61 Venango	928	902	1,255	929	....	1
62 Warren	1,216	1,428	2,347	2,861	9	10
63 Washington	135	128	112	75	....	....
64 Wayne	1,128	1,480	1,832	2,000	6	1
65 Westmoreland	926	1,130	1,484	979	....	....
66 Wyoming	411	484	933	843	8	2
67 York	252	249	260	263	....	....
Unknown	46	30	65	38	....	2
Total	46,738*	49,254**	65,187*	55,862**	439	294

\* Includes 1358 deer killed during the Special Archery Season.

\*\* Includes 1358 deer killed during the Special Archery Season.



Official 1958 Game Kill

Species	Number Season of 1958*	Number Season of 1957*
Deer, Legal Antlerless .....	65,187	55,862
Deer, Legal Antlered .....	46,738	49,254
Total Deer .....	111,925***	105,116**
Bears .....	439	294
Rabbits .....	1,305,031x	1,455,862
Hares (Snowshoes) .....	1,277	1,614
Hungarian Partridges .....	(Closed)	(Closed)
Squirrels .....	686,525	728,342
Raccoons .....	111,105	139,397
Wild Turkeys .....	13,008	16,156
Ruffed Grouse .....	43,815	41,694
Ringneck Pheasants .....	437,670	465,955
Quail .....	11,726	12,057
Woodcocks .....	11,992	9,854
Rails, Gallinules & Coots .....	7,204	5,609
Grackles (Blackbirds) .....	#	#
Wild Waterfowl .....	58,627	64,625
Woodchucks .....	282,546	311,497
Doves .....	44,791	39,699
Total Number .....	3,127,681	3,397,771

\* Small Game, based on Field Officers, estimates; Big Game, based on individual reports filed by hunters.  
\*\* Includes 1,358 Deer killed during the 1957 Special Archery Season.  
\*\*\* Includes 1,358 Deer killed during the 1958 Special Archery Season.  
x Includes 76,790 Rabbits killed from December 27, 1958 to January 3, 1959.  
# Unprotected—No data

National Survey Shows Record Number of Licensed Sportsmen; Pennsylvania 3rd In Resident, 2nd In Non-Resident Hunters

Nearly a million more fishing licenses were sold in the United States during the federal fiscal year ending June 30, 1958 than in the previous year .Hunting licenses showed a decline, however, of 154,000 according to a report just released by the Fish and Wildlife Service of the Department of Interior.

The combined total of 34,941,729 licenses sold to sportsmen in 1958 exceeded all previous records and represents an increase of 746,546 over the 1957 record. The total was made up of 20,177,605 fishing licenses and 14,764,124 hunting licenses. Total cost to hunters and anglers for all licenses, permits, tags and stamps (not including the Federal "duck stamp") was \$99,018,130, an increase of \$8,-401,091 over the previous year.

The hunting license total was divided on the basis of 14,330,450 residents and 433,719 nonresidents. Wyoming had the greatest number of

nonresident hunters—42,882—followed by Pennsylvania with 40,527. Leaders in resident hunters were: Michigan—1,136,253; New York—953,068; and Pennsylvania—929,990.

Comparative figures for 1957-58 and 1956-57 are shown for the 10 States having the highest total sales. The Fish and Wildlife Service tabulation is based on the fiscal year from July 1 to June 30; Pennsylvania license totals are based on its license year, September 1 to August 31.

HUNTING LICENSES

1957-58

Michigan .....	1,154,851
New York .....	974,713
Pennsylvania .....	970,517
Ohio .....	739,037
Indiana .....	664,251
California .....	642,839
Wisconsin .....	624,787
Illinois .....	512,860
Minnesota .....	509,369
Tennessee .....	411,021

## Forest Service Reports Less Deer Hunting On Allegheny Forest

The Forest Service reports less deer hunting on the Allegheny National Forest than last year, according to John E. Franson. District Rangers and their assistants made a survey of 233 miles of roads in the Forest area during the first two days of the antlered season and the first day of the antlerless season.

Forest officers found that on the first day of the antlered season there were only 60% as many hunters in the woods as in the 1957 season and on the second day there were 30% less hunters than on the same day last year. The unusually cold weather and snow during the first two weeks in December apparently kept many hunters from hunting deer and caused more "road hunting" than usual.

There is still forest area on the Forest not being fully utilized by deer hunters, mainly because of the lack of roads or trails.

The antlered kill observed in the survey is off 33% on the first day and 17% on the second day as compared to 1957 success. The ratio of antlerless and antlered deer improved since 1956 and 1957 seasons. This estimate is based on reports of hunters.

Hunter success on the first day of antlerless season does not appear to be as successful as in the 1955 season. No data are available for comparison with the 1957 season.

Examination of 250 antlerless deer killed showed 30% males and 13% fawns. Almost 60% were adult does. Twenty-three percent of the males killed had shed their antlers and the remainder were button bucks.

**WILDLIFE CONSERVATION AWARD** for outstanding contribution to the cause of conservation was bestowed by the Game Commission upon these members of the Susquehanna Council, Girl Scouts of America for their part in the Outdoor Education Project at the Pennsylvania Recreation and Sportsmen's Show in Harrisburg last March. Left to right: Game Commission representative Earl Geesaman, Mrs. Molly Hench, Unit Leader; Senior Scouts Kathy Lapano, Carol Schneider and Marianne Fabiankovitz.

Department of Public Instruction Photo





## Pennsylvania To Be Host To 18th Annual Convention American Association For Conservation Information

Pennsylvania's Pocono Mountains will be the setting for the 18th Annual Convention of the American Association For Conservation Information this month. The Association, comprised of 53 conservation agencies in 42 states, three Canadian provinces, and Hawaii, is scheduled to meet at Mountain Lake House, Marshalls Creek, May 24-27. More than 100 information-education specialists are expected to attend the three day meeting, along with Pennsylvania outdoor writers, conservationists from various state and federal agencies, and educators from colleges and universities.

The convention will be keynoted by Dr. Harold J. O'Brien, Professor of Speech, Pennsylvania State University. Monday's program features a panel discussion on information-education development led by Bryant R. Chaplin, Information-Education Chief of the Massachusetts Division of Fisheries and Game. Donald Lerch, Jr., nationally known consultant on agricultural and public affairs of Washington, D. C. will conduct a panel critique of radio and television programs. Richard Dew, General Manager, Pennsylvania Newspaper Publishers Association. Harrisburg, heads a panel critique of news releases distributed by governmental conservation agencies.

On Tuesday, Jim Dee, Director of Shooting Development, Sporting Arms & Ammunition Manufacturers Institute, New York, will lead a panel discussion of the Outdoor Education Program; Richard Weaver of the Conservation Department, University of Michigan will critique conservation education manuals for teachers; Stan Mate, Director of Training Activities, National Rifle Association, Washington, D. C. will give a progress report on Hunter and Firearms Safety; Dr. Ira Gabrielson, of the



Wildlife Management Institute, Washington, D. C. will critique state conservation publications; and George L. Fersh, Director of Conservation and Resources, Joint Council on Economic Education, New York will speak on economy in conservation. Wednesday's program is devoted to the annual business meeting of the Association.

Co-chairmen for the convention are Leo A. Luttringer, Conservation Education Officer for the Pennsylvania Game Commission and Robert Glover, Public Relations' Officer for the Pennsylvania Fish Commission. C. Elwood Huffman, President of the Pennsylvania Game Commission will officially welcome the delegates to Pennsylvania. The Association's president is Jack Dyer of the Arkansas Fish and Game Commission. Other officers include Wilbur Stites, Wisconsin Conservation Department, 1st Vice-president and acting secretary-treasurer and C. D. Tolman, Colorado Game and Fish Commission, 2nd Vice-president. The Association's annual banquet will be held Tuesday evening. Convention program sessions are open to the public.

## COMMISSION TRAINS BOUNTY INVESTIGATORS

During recent months groups of Pennsylvania Game Protectors selected from the Game Commission's six field divisions underwent a course of training by Commission specialists at the Harrisburg office. The instruction was along the following lines: the month to month fur development of red and gray foxes; identification of these animals, also great-horned owls, which have been held in captivity; fur characteristics of foxes taken in other states; and related subjects, including field investigation of suspected fraudulent bounty claims. The training was instituted to provide the officers with additional know how in detecting improper bounty claims and investigating claims intentionally probated contrary to the provisions of the law.

During most of the year the Game Commission pays bounty on the following predators: \$4 for each red or gray fox and \$5 for each great-horned owl killed in Pennsylvania and presented for payment as prescribed by law. *(This year no bounty will be paid for the foxes and owls killed between the opening date of the small game season and the 31st of December, inclusive.)*

During the last fiscal year, which ended May 31, 1958, some 230 claims

were turned over to the field officers for investigation. Bounty was disallowed on 232 gray foxes, 273 red foxes and 14 great-horned owls. Fines collected totaled \$1,475. This year the number of fraudulent claims may not exceed 150, which reflects the tightened procedure.

The investigative training the Game Protectors received from the bounty claim specialists will better qualify them to detect an incorrect date of killing or some other infraction of the bounty claim law, thereby preventing violations in some instances. Generally speaking, the added knowledge of furs will bring other worthwhile services to sportsmen, as well as help to uncover cases in which false claims are deliberately probated.

Desiring to reduce the number of fraudulent bounty claims and the problems they bring about the Game Commission offers the following suggestions:

1. Probate only foxes and great-horned owls you killed in Pennsylvania.
2. Do not attempt to collect bounty for a fox or owl after it has been held in captivity.
3. Keep an accurate record of the date you killed each of the predators, and make sure the dates on the bounty affidavit are correct.
4. Do not present the pelts of unborn foxes in claim for bounty.
5. Do not give another person a fox or owl you killed so that he may collect bounty.

During the last fiscal year the Commission paid bounty on 18,125 red foxes; 11,006 gray foxes and 1,115 great-horned owls for a total expenditure of \$122,009. Of course, money saved through the detection and disallowance of fraudulent bounty claims leaves that much more in the Game Fund for the overall wildlife management program in Pennsylvania.







Photo courtesy Paul Blair  
FEDERATION OFFICIALS AND GUEST posed for this picture during the annual spring meeting in Harrisburg March 20-21. Left to right: Seth L. Myers, state delegate to the National Wildlife Federation; Merrill C. Merriots, regional director of the National Federation; James Sheffer, alternate state delegate; and the Hon. Ross L. Leffler, Assistant Secretary, U. S. Department of Interior. Mr. Leffler was one of the principal speakers before the convention on Saturday morning, March 21.

**Pennsylvania Enjoyed Good Year  
For Forest Fire Prevention In '58**

Secretary of Forests and Waters Maurice K. Goddard announced today that 1958 was the third best year on record for the prevention of fire in the state's forests.

"Last year 15,650 acres of forest, brush, and grassland were burned by blazes classed as forest fires," Goddard said. "This record was bettered in only two previous years—1948 and 1956."

The Forests and Waters Secretary noted that the area burned compares very favorably with the 1953-1957 average of 26,806 acres burned per year.

Goddard pointed out that for the second year since fire records were first compiled, there were no forest fires of over 500 acres in the Commonwealth.

"We have two things to thank

for our good fortune," Goddard remarked. "First is the growing effectiveness of our fire fighting force of between 3600 and 4000 volunteer fire wardens. The second very important factor has been favorable weather."

Brush and debris burning led all other causes as the source of forest fires in 1958. Goddard listed the fire sources in order of the number of fires caused by each:

Source	No. of Fires	Area Burned
Debris burners ..	202	3169
Railroads .....	150	4638
Smokers .....	119	1084
Hunters .....	100	657
Children .....	90	698
Incendiaries ....	74	3257
Unknown .....	55	500
Miscellaneous ...	41	746
Transients .....	32	391
Fishermen .....	23	342
Dumps .....	12	140
Lightning .....	6	27
Lumbering .....	1	2



PGC Photo by Batcheler

## Game Commission's Conservation School Graduates Ninth Student Officer Class

**T**WENTY-ONE student officers who successfully completed a 9-month course in wildlife management at the Game Commission's Ross Leffler School of Conservation, located near Brockway, Jefferson County, were graduated on March 21. The new Pennsylvania Game Protectors, who will serve a probationary term of one year before final acceptance as regular members of the Commission's field force, received their diplomas and commissions in impressive ceremonies staged at the Brockway Area Joint High School. Commission members, staff officers, families and friends witnessed the graduation exercises.

Presiding officer was the Hon. C. Elwood Huffman, President of the Pennsylvania Game Commission. The invocation was delivered by the Rev. John C. Cronin, St. Tobias R.C. Church, Brockway. The Conservation School staff and the graduating officers were introduced by School Superintendent Donald E. Miller. Principal addresses were delivered by the Hon. Maurice K. Goddard, Secretary, Pennsylvania Department of Forests and Waters and James D. Moyle, a student officer representing the grad-

uating class. The official welcome, remarks to the graduate officers and presentation of diplomas and commissions was made by M. J. Golden, Executive Director of the Pennsylvania Game Commission. The oath of office was administered by John Sullivan, Deputy Attorney General. Benediction was asked by the Rev. Harvey M. Smith, pastor of the Brockway Presbyterian Church. The Brockway Area High School Band furnished music for the occasion.

The graduating class began its intensive course of instruction on July 1, 1958. Approximately two-thirds of the 9-month course was spent on classroom study at the school. There Commission instructors and numerous visiting officials from conservation agencies, law enforcement organizations and universities combined to teach subjects covering the wide field of wildlife management. The course included biology, land management, law, legal procedure, police sciences, game management and propagation, public relations and public speaking. The student officers spent the remainder of the training period in the field at seasonal periods, acquiring practical experience and



knowledge under the tutelage of veteran Game Protectors.

The Pennsylvania Game Commission conducted its first in-service training program for field personnel in 1932. This training proved so effective that by 1936 the Commission established a fixed policy under which all future field officers have been selected by competitive examination followed by an intensive course of training. A school, later named the Ross Leffler School of Conservation, was established by the Commission for this purpose and is operated from its present location whenever the need for new field officers arises. Since the School was first placed in operation on July 2, 1936, a total of 182 student officers, all residents of Pennsylvania, have been graduated.

The resident staff for the course just completed included Donald E. Miller, Superintendent, and Calvin A. Hooper, Assistant Superintendent. Roger J. Wolz served during the past few months as Resident Instructor and Mrs. Shirley L. Martini, of

RESIDENT STAFF for the course of instruction given the 9th Student Officer Class was comprised of, left to right: Superintendent Donald E. Miller; Resident Instructor Roger J. Wolz; and Assistant Superintendent Calvin A. Hooper.



SCHOOL GRADUATES, diplomas in hand, leave the stage following graduation ceremonies at the Brockway Area Joint High School on March 21. The Brockway Area High School Band furnished music for the occasion.

Brockway, served as Typing Instructor and Secretary.

The names, homes addresses, and present assignments of the graduating class follow:

Altmiller, John L., Hazleton—  
Lackawanna County.

Badger, John A., Portersville—  
Indiana County.





PGC Photo by Parlamen

NEW GAME PROTECTORS assigned to the Commission's Northwest Field Division are briefed by Supervisor Temple A. Reynolds. Left to right: John R. Miller, of Somerset County, assigned to Titusville, Crawford County; Jerry Stager, of Wellsboro, assigned to Erie, Erie County; Supervisor Reynolds; Leo Badger, of Ellwood City, to Knox, Clarion County; and David C. Kirkland, of St. Marys, to Clarion, Clarion County.

Badger, Leo J., Ellwood City—Clarion County.

Clark, Edward T., Folsom—Franklin County.

Divers, Edward F., West Mifflin—Luzerne County.

Feaster, Richard C., Mt. Union—Delaware County.

Graver, Alfred L., Bath—Bucks County.

Griffie, William A., Gettysburg—York County.

Hancock, John B., Pittsburgh—Clearfield County.

Kirkland, David C., St. Marys—Clarion County.

Matikiewicz, Joseph J., Thompson—Centre County.

Miller, John R., Gray—Crawford County.

Moyle, James D., Lewistown—Perry County.

Ruths, Richard W., Kulpmont—Dauphin County.

Shaffer, Robert P., Bedford—Juniata County.

Sherlinski, Edward F., Plymouth—Montgomery County.

Stager, Jerry J., Wellsboro—Erie County.

Szilvasi, George T., Ellwood City—Allegheny County.

Waldman, Guy W., Williamsport—McKean County.

Warfield, Mervin L., Pottsville—Carbon County.

Wecker, Fred J., Falls Creek—Bradford County.







# OUTDOOR FUN WITH A FUTURE

## Forests & Wildlife

By Ted S. Pettit

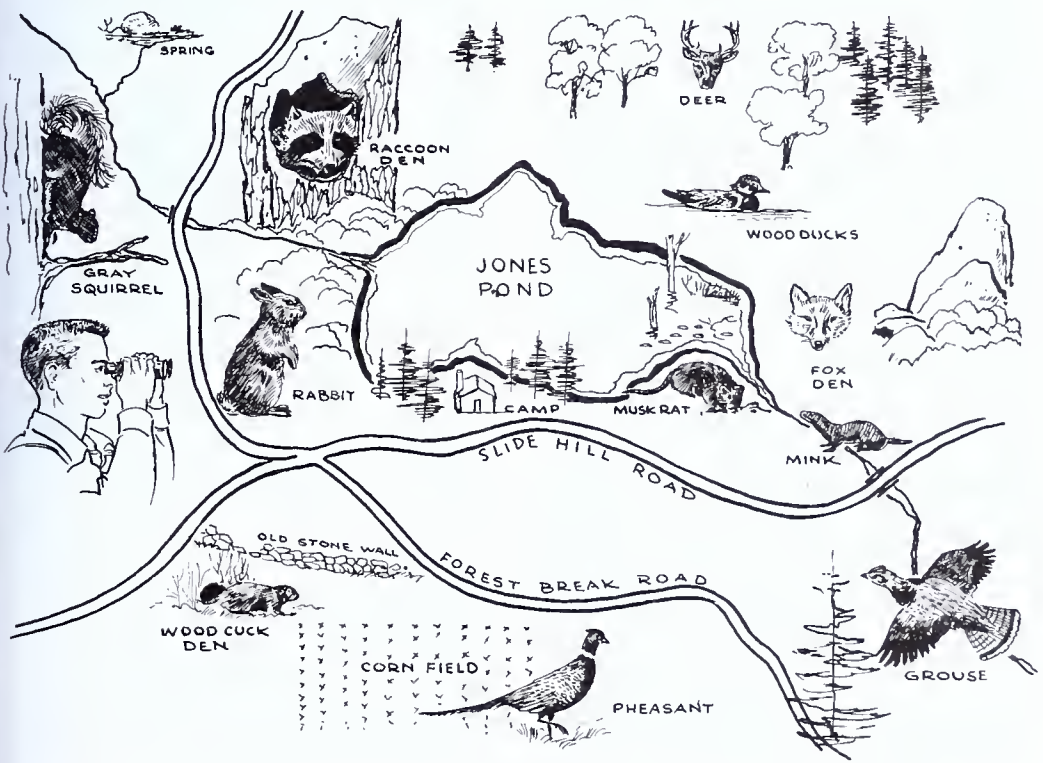
**T**ODAY, a large part of the Commonwealth is covered with forest land—some 15 million acres to be exact. Because of the soil, moisture and climate conditions, most of the open land in the state would go back into forest, in time, were it not for man's interference with nature. Thus forest animals—deer, grouse, turkeys, bear, and squirrels are among our most important wildlife species and a large part of the wildlife manage-

ment work in the state is designed to improve conditions for these animals.

There are many different things that outdoorsmen can do on their own lands and on other lands such as Scout camps to help improve conditions required by these animals. Let's consider a few of them.

### Find Out What's There

Any conservation project must almost necessarily start with an in-



ventory or a survey of conditions as they exist at the moment. The first step then is to spend a few hours a day for several days in the woods trying to find out what animals are there how and what already exists in the way of food, cover and water.

This is an excellent group project for a Scout troop, 4-H club, junior sportsman's club or other group.

Select an area that is known to have some wildlife. It may be a farm woodlot; a section of a riverbank and bottom land; a forested area; a small marsh, pond, or lake. The project may be accomplished in a day, or it may be more thorough and require a number of visits during different times of the day or seasons of the year.

To become familiar with the area, the group leaders should first visit it, and then, with the knowledge of the group's size and the individual capabilities of its members, prepare field projects which each boy or team will carry out. For example, on a farm the group could be split up into a number of small teams. Each team would record the number and kinds of birds and mammals seen, together with the type of habitat in which they were observed, such as cornfield, weedy fence corner, brush-covered rock pile, apple orchard, shelter belt, or farm pond. A team's notes should include the activities of the animal, such as the selection of certain plants as food, the feeding of young, digging of burrows or building of nests, and any unusual actions that may have been seen. Additional information should be collected, such as notes on tracks, wildlife kills, broken eggshells, or other signs.

At an appointed time, the group assembles at a given place on the area and the leader will ask for a report from each team. The entire group will then return to each location and will attempt to see as many as possible of the items previously observed by the individual team,

after which the leader will attempt to explain or elaborate upon points of interest.

A permanent record of the field trip will have value in measuring changes in the wildlife habitat or the effect of seasons on certain animals. Have someone draw a free-hand map locating each point of interest. Another person or group can write descriptions of each observation. The inclusion of pictures taken during the day will add great interest and value to the record. Any materials collected during the day might be used to develop a small exhibit.

The leader may often receive considerable assistance in laying out a field project of this type and in the identification of birds and mammals or other natural history items by contacting a local office of the Game Commission, the Fish and Wildlife Service, or biology instructors in local schools or colleges. Members of wildlife organizations such as the National Audubon Society, The Izaak Walton League, and other local groups interested in wildlife should also be considered as a source of information.

The map showing where different kinds of wildlife are found locally can be used by school nature clubs or classes or other groups on nature hikes.

### **Improving Woodlands for Wildlife**

In considering things that can be done to improve woodlands for wildlife, let's start with an established wooded area. But first, let's think for a minute about what animals require to live successfully in a forest.

Like you or me, they need food of the right kind and enough of it. They need places to raise their young; and places to find shelter from their enemies. For most animals, that means a brushy undergrowth of the right kind of shrubs, growing close to the ground. For some animals such as squirrels or raccoons, it means den





rees as well. How do we go about getting these things?

One thing to do, if the woodland is an old one with large trees that have shed out undergrowth—or a dense stand of second growth trees that also have shed out undergrowth, is cut trees to provide woodland openings. Blocks of trees can be cut to let the sun reach the ground.

Two things will happen. The stumps may grow some new shoots or sprouts that will grow densely and provide browse and cover. Other shrubs that need light will grow for a few years until the trees again shade them out. But in the meantime, these shrubs such as blackberry, raspberry, elderberry and others will provide food and cover.

Along the edge of the woods, a twenty or thirty foot wide strip of trees can be cut. A heavy growth of brush will then come up because the sun can get at the ground. This brush will provide food and cover, and will also act as a windbreak. It will slow up the drying winds and push them up over the forest, thus helping to keep the woodland soil moist so that young trees can grow. The young trees in turn provide browse and buds for game animals to eat.

Sooner or later, of course, trees

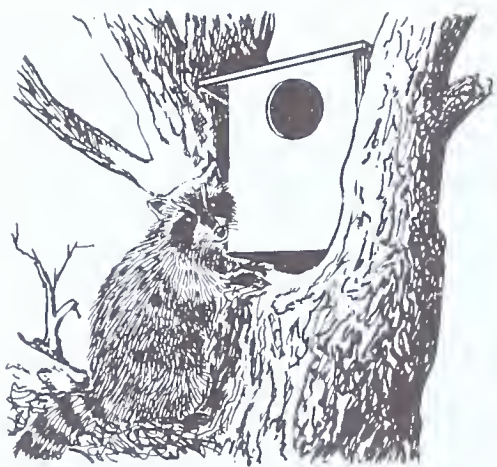
will again grow along this border, and to keep it as a brushy border you will have to cut it over every few years.

The chief purpose of these two kinds of cutting is to provide different stages of plant growth in and along the edges of the woodlot or forest and to break up large stands of trees. These different stages of growth and a larger variety of shrubs that will grow in such openings help provide the three things that animals need to live and increase in numbers.

The trees or saplings that are cut to make these openings should not be wasted. If large enough, they may be used for saw logs. If not, they may be useful as fence posts or fuel. The branches and saplings may be used to build brushpiles along the edges or in nearby fence rows or hedgerows.

To make a brushpile, criss-cross cuttings such as saplings or branches to form a pile at least six feet high and fifteen to twenty feet across. Put large branches on top to weigh it down so wind will not blow it over. But place the brushpile just at the woodland edge, so that animals can get to it and away from it without exposing themselves to enemies.

The brushpile will serve several purposes. Immediately animals can



hide in it. But birds will perch on it, and build nests in it. Their droppings will contain seeds of food shrubs, and before long in and around the brushpile, you will find these shrubs starting to grow. Later on, there will be a dense thicket of shrubs that provide food.

Meantime, a woodchuck may dig a burrow under the pile, and the burrow in time may supply a home for a family of rabbits. A string of brushpiles along the edge of woodlot, and around a woodland opening is as easy and very practical project, and in a relatively short length of time, it will help improve conditions for wildlife in the area.

In many places nest boxes are a good project and provide homes for wildlife that might not otherwise be available. The illustrations on these pages show typical designs for squirrel and raccoon nest boxes, wood duck boxes and songbird nesting houses.

Many woodlands are almost useless for wildlife because of cattle grazing in them. Livestock grazing in a forested area keep young trees and shrubs from growing, trees and shrubs which supply ground cover and food. Just as important, cattle grazing in the woods will pack down the soil so that rain water cannot soak in and fill the needs of the older trees already growing there. A grazed woodlot is not a good pasture

or a good woodlot. If it is grazed for too many years, there will be no young trees to replace the old ones when they die, and in the meantime the cattle themselves do not find as good grazing as they do in an open pasture. Few kinds of wildlife can find the right kind of living conditions in a grazed woodlot.

The best plan is to fence the woodlot to keep cattle out. At first, a wire fence will probably be necessary, and the woodlot by itself will take many years to recover. Inside the fence, between the fence and the forest, it may be necessary to plant trees or shrubs to act as a windbreak, and to provide the ground cover that animals need. Spruces or pines planted along the edge, and back into the woods will serve this purpose. They will grow quickly, and they grow well in partial shade. As they grow they will help keep wind out of the woods and help the soil retain its moisture.

Providing den trees in a forest is another reasonably easy and worthwhile project. Many times, it involves nothing more than leaving a dead or dying tree where it is, instead of cutting it for fuel. Den trees are usually easy to find. They are large trees with hollow places in them—sections of trunks that have rotted out. Sometime branches have died and have fallen off, leaving a rotted out hole in which squirrels, raccoons or wood ducks may build a den or nest.

In many woodlots, there are what foresters call "wolf trees." These may be huge birch or maples whose branches spread out and shade out more desirable trees. Many of these wolf trees would make fine den trees, but they are still sound and healthy. But they may be killed by girdling. Use an axe, and cut through the bark to the wood in a circle about three feet up from the ground. This will kill the tree and in a few years it will be a den tree. In the meantime, it will cease shading out the trees around it, and they will be able to



grow straight and healthy, getting the light they need and the nutrients from the soil that the wolf tree previously used up.

In many of our second and third growth woodlots and forests, trees are not large enough in diameter to provide nesting sites for birds, or mammals such as squirrels or raccoons. The trees may provide the necessary food and cover but places to nest are lacking.

In areas such as these, you may provide nesting sites by building and putting out nesting boxes. Large boxes may attract squirrels or raccoons, and smaller boxes, built correctly, will give song birds a place to raise their young.

Along the edges of ponds, lakes or marshes, wood duck nesting boxes have proved successful in attracting the most beautiful of all our ducks. The Wildlife Management and Nature Merit Badge pamphlets show how to build and set out these nesting boxes.

Here is another project that may be carried out in a woodland, or along the edge, to improve conditions for wildlife.

Sometimes the trees in a forest are too high for animals to reach the new shoots or buds for food. Trees such as aspen or poplar provide browse for deer and the buds are eaten by grouse. It's easy to saw or chop halfway through trees of this sort, about four feet up from the ground, and push them over. Sap will still flow thru half of the tree and keep the new growth green; and the buds will become new leaves. Animals can now reach the food and at the same time the tree will provide some ground cover. If several trees are cut in this way in a small block, light will enter the opening and enable shrubs to grow at the same time.

### Planting Trees for Wildlife

So far, we have been talking about things to do in a woodlot or forest

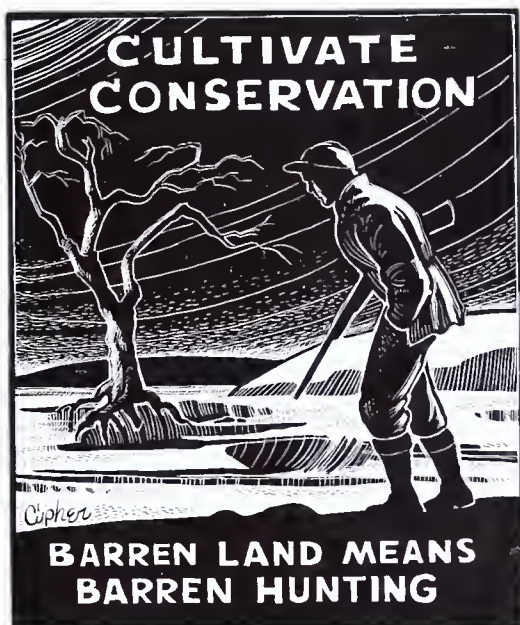
that already exists. But there is another phase of "forests and wildlife," that is equally important—planting trees or creating wooded areas where none grow now.

There are several kinds of places on many campsites, farms or open land suitable for trees. In fact many of these areas probably should have been left in trees in the first place instead of being cleared for planting or pasture.

Steep hillsides, rocky slopes or rocky fields, the edges of ponds or streams, eroded gullies, abandoned pastures or abandoned farmland—all may be planted in trees, and planted so that they are beneficial for wildlife as well as productive of future wood products.

Two of the best areas on which I have hunted grouse were farmed up to about twenty years ago. They were then planted in spruce and pine—and now produce a good supply of game birds along with the new tree growth each year. The secret, though, was planting the young trees in strips, instead of large solid blocks.

In one area, spruces were planted in an old apple orchard. The young trees were planted in the open area between the rows of trees. The re-



sult now is something like this: five rows of spruces (planted 8 feet apart in a row); a row of apple trees planted about forty feet apart; five rows of spruces; another row of apple trees, etc., cover about fifty acres.

In the open area in which the apple trees grow are all sorts of shrubs and small hardwoods that provide food for grouse. Of course, the apple trees themselves provide good food. The dense growth of spruces provide ample cover in the coldest weather. Together, they make an excellent grouse and rabbit habitat. Of course, you almost have to shoot from the hip to hit a bird or a bunny before it gets out of the open strip into the dense spruce—but that just adds to the thrill.

The second area is much the same, except that the confers are pines, and the food strips were planted in between. In that area pines were planted in strips of ten rows each, with trees ten feet apart in a row. Between the ten-row strips of pines are fifty-foot wide strips of mixed food shrubs for wildlife—dogwood, high-bush cranberry, elderberry, several annuals such as corn, and other foods. Much the same conditions exist. The birds and rabbits feed in the food strips and find cover in the dense pines.

This method of planting provides the hint for helping wildlife. Plant pines or spruces in strips—and leave open areas in between. These open strips will have to be “managed” or trees will soon grow up and compete with the pines or spruces. By cutting down trees as they grow in the open areas, you can keep the open strips in a brush stage that will provide food and cover. Some brush piles in the open strips would help too.

Other areas that are suitable for planting in trees are eroded gullies and rocky slopes. The trees will help prevent erosion and will gradually heal the gully or eroding slopes. But at the same time, these trees provide shelter and homes for wildlife.

## Mast Trees

Mast is a word that you may associate only with sail boats. But it also means the many kind of nuts that grow on trees. Several kind of animals make good use of mast among them being raccoons, deer, bears, pheasants, turkeys, quail, grouse, ducks and squirrels. So trees such as oaks, beech, hickory, walnut or butternut are all important to wildlife.

You've probably seen these trees growing in the open—along fences, roads or field edges. You've probably noticed their spreading tops—and the fact that they produce much larger crops of nuts than trees in the forest that have smaller crowns. You can use this observation in wildlife conservation work. If there are mast trees growing in the open, leave them there—and if necessary, cut out any competing trees that slow up their growth. Even in the woods, you might cut around a few mast trees to give them more room to spread out and produce larger crops of game food.

It's also a good idea to plant the nuts of these trees to help them get a start, if necessary.

When you plant walnuts, hickory nuts or acorns you must do it carefully. First, the nuts cannot be planted more than an inch or two deep. But squirrels may dig them out for food. So to prevent this, use old tin cans, with one end cut out. In the other end cut an X with each leg being an inch and a half long. Bend up the points a little and push the can open end down over the nut. Be sure to push the can all the way into the ground so that the X cut is flush with ground level.

When the nut sprouts, the seedling will grow up through the X cut opening. By the time the tree is large enough, the can will have rusted away. But for the first growing season the can will protect the nut from squirrels.

Such plantings of trees like wal-



nuts, can be made along fences, wood edges and roadways. They should be planted so as to form a lane or runway to cover. In that way animals coming out to feed will not as easily fall prey to their enemies.

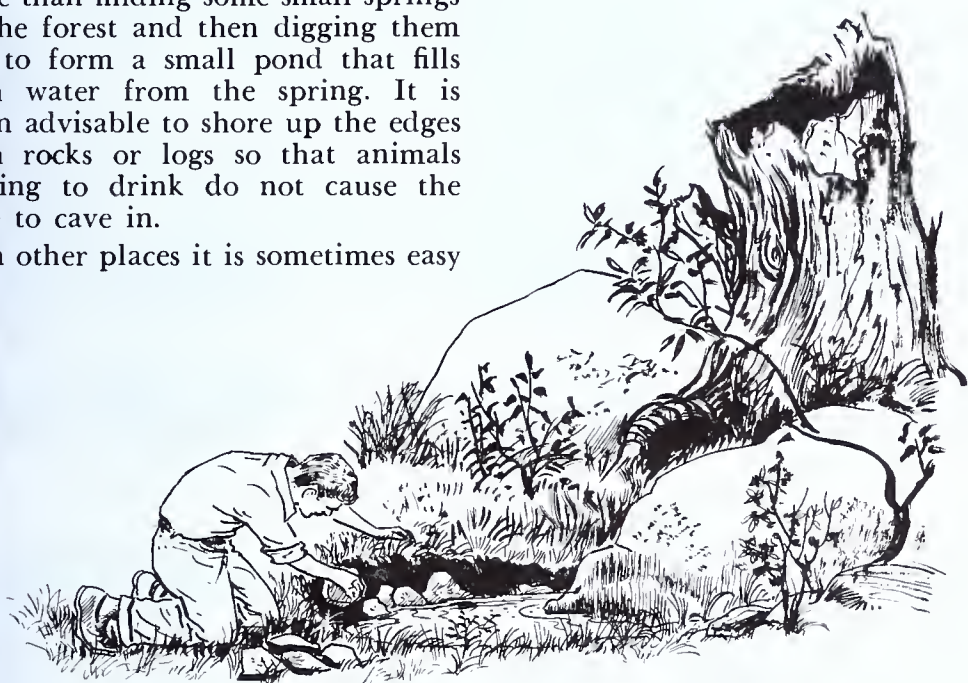
### Water for Wildlife

In many areas providing water for wildlife is an easy and practical project. Many times it consists of nothing more than finding some small springs in the forest and then digging them out to form a small pond that fills with water from the spring. It is often advisable to shore up the edges with rocks or logs so that animals coming to drink do not cause the hole to cave in.

In other places it is sometimes easy

to find a small stream and to put small rock or log dams in it to back up a small pond of water.

Any or all of these things help improve wooded areas—or potentially wooded areas for wildlife. They are all fun with a future since they are fun to work on now, and in a year or more they will make an area more productive.



### State Forests Yield \$400,000 In Timber

Secretary of Forests and Waters Maurice K. Goddard today reported that the Commonwealth sold approximately \$400,000 worth of timber from State Forest lands during 1958. The trees were cut under a scientific plan designed to encourage better forest growth, watershed management, more food and cover for wildlife, and a sustained yield of more and higher quality timber.

Secretary Goddard said that 20,925 million board feet of saw timber were sold during the past year, a drop of a little more than 5,500 board feet from 1957. The Forests and Waters Secretary explained the decrease by

a reduction in demand for timber used in making railroad ties. Goddard added, however, that the volume of cordwood sold for pulp increased from 17,133 cords in 1957 to 23,592 cords in 1958.

Income derived from the sale of the timber goes into the state's General Fund. Most of the wood is sold on a contract basis to the highest bidder. Permits are usually issued for small cuttings amounting to less than \$300. Special Forest Ranger permits may also be issued by District Foresters for cutting dead or damaged timber in amounts not exceeding \$25.00.



Photo by Maslowski & Goodpaster

# Pennsylvania's Elusive Woodchuck

By Jim Varner

**W**OODCHUCK hunting has developed into a major sport in the Keystone State. Thousands of dollars are spent annually on super-accurate, long range, high velocity rifles equipped with all types of optical sights. To cover the story thoroughly in one article would be next to impossible. But in response to many requests for information on this type of hunting, I'll endeavor to at least help the beginner. In a future article we will call the woodchuckers together again and discuss ballistic possibilities of new or near new calibers, considering accuracy, trajectory, wind bucking, as well as safety. This will be done in the field

and from the bench rest using the best of components in hand-loading as well as new factory ammunition at ranges of 200 to 500 yards according to caliber.

Pennsylvania's woodchuck is our third largest rodent-type animal. The beaver is first and the porcupine second. The average length of an adult 'chuck is 22 to 28 inches, including a five or six inch tail. Woodchucks weigh from eight to 12 pounds. They belong to the "seven sleepers" and hibernate early. You seldom see a chuck after the first heavy frost. During late February or early March they usually emerge and promptly start feeding on any vegetation that may be available at this time of year. Mating takes place about the middle of March and two to six young are born four weeks later. The young are naked and blind and measure some four inches in length, weighing approximately one ounce. They can crawl at three weeks and leave the





den a week or ten days later. The young are playful little fellows and are comical to observe through good binoculars.

Woodchucks have tremendous appetites and seem to be eating or seeking food a good share of the time. This makes them extremely unpopular with the farmer and gardner since they raid everything from pea and bean vines to field corn. Out in the big fields they consume great quantities of clover, alfalfa, timothy and other grasses.

Some people consider chucks a great delicacy when properly prepared. One thing sure, they are clean and strictly vegetarians. The big rodent lives in extensive burros extending as much as 30 or more feet underground and having two or more outlets. While he seems to prefer rolling hillsides and rock outcroppings, he works a lot in fields and bottomlands along creeks and rivers, especially during the summer months. You will find them in the wooded areas and along old stone walls and

fences. Old Marmota can swim and climb trees. He has near binocular vision and can detect vibrations of the earth at great distances which makes him very difficult to stalk. He possesses great courage and can inflict a dangerous wound when cornered. The numerous burrows he makes serve as escape havens for rabbits as well as homes for numerous other earth dwelling animals. Farmers and stock raisers consider these holes extremely dangerous to livestock. The woodchuck's geographical range covers most of our states. With this run-down on some of the characteristics of Pennsylvania's elusive woodchuck, let's turn now to a discussion on how to get the most out of bagging our quarry.

First, know the laws pertaining to woodchuck hunting. They are listed as a game animal which makes it illegal to hunt for them on Sunday. At the present time bag limits per day and season are unlimited and they can be hunted from 7:00 a.m. to 5:00 p.m., EST until July 1st. From



**WOODCHUCK HUNTING 1927 STYLE** took gun columnist Jim Varner, left, and companion afield near Tunkhannock, Wyoming County. They used 30/06 rifles. The one on the left is a Star Gauged military Springfield restocked to a sporter with a Winchester five-power target telescopic sight. Rifle on the right is a Model 30 Enfield type Remington sporter with one of the original Belding and Mull 3X hunting scopes.



MODERN VARMINT RIFLES will do most anything you wish on long range target or varmint shooting. Top to bottom: Winchester Model 54 heavy barrel "Bull Gun" in 30/06 caliber with Lyman Super Targetspot Scope; Model 70 Winchester in 220 Swift caliber with monte-carlo stock and 9X United scope on Weaver pivot mount; Winchester single shot high-wall action in 219 Zipper Improver Caliber with heavy Buehmiller barrel and Fecker 10X target scope; Model 721 Remington ADL grade with United 3X to 7X variable scope.

July 1 to September 30 the legal shooting hours are 6:00 a.m. to 7:30 p.m., EST. Shooting from cars on the highways and careless shooting around farm houses, livestock, or farmers working in fields is prohibited. Always obtain permission from the landowner before hunting and observe the rules of good sportsmanship and safe handling of firearms. It is unlawful to use automatic, semi-automatic or auto-loading rifles for hunting woodchucks or other small game. Strictly avoid digging in fields, tearing down stone walls, tramping down grain and mutilating fences. This type of vandalism brands the would-be nimrod as an undesirable and ruins farmer-sportsmen relationships.

Contrary to popular opinion the ultra high-speed, long range rifles can be used more safely in farming areas than the 22 rim-fires and the old slow calibers like 25/20, 32/20, 38/55 and 44/40's. The modern high-speed bullet travels so fast it disinte-

grates on shale, stones or even soft earth and will not ricochet, while the slower lead and jacketed bullets go whining across the landscape unless they hit a bank, ledge or tree solidly. About the only objection the average agriculturist has against hunting chucks with the vermin rifle is its loud report. He associates noise with danger. Here's where the sportsman can demonstrate to him how a bullet travelling over 2500 feet per second really blows up on a half gallon can of water or at an angle when it is fired into any kind of earth. Few people understand this feature. The slow bullet will ricochet most every time.

The clothing you wear should blend with the background but for safety, wear a cap of bright color. Shoes should have soft soles for minimum disturbance when walking, and your pace should be very slow and deliberate with emphasis on careful scanning of the area around and especially ahead of you. A good pair



of binoculars is a must in my estimation. They definitely add to the pleasure of all outdoor sport whether it's bird study, chucks or big game stalking. They save you hundreds of extra steps. Binoculars should be not under 6X30 and not over 10X50 as any magnification above ten diameters is difficult for the average hunter to handle efficiently without a tripod. The 7X35 and 8X40's are an excellent compromise. Both are made in featherweight models with wide angle lens which have a field of view of over 500 feet at 1,000 yards range. Their light gathering power is tremendous and brilliance so great one can see quite well with them on an average moonlight nite. A good 10X50 binocular is powerful enough to see a 22 cal. bullet hole in the target under average light conditions at 100 yards range. With such precision instruments one has no excuse for mistaking anyone, or another animal for the one he is hunting. They certainly prevent accidents if used half way intelligently.

Woodchuck hunting is not an old sport when compared to other small game and big game hunting. Many were killed by the pioneers by digging them out for food or to get rid of them around their crops. Perhaps now and then one standing up in the field or on the settlers stone fence received a ball from an old Kentucky, but powder was hoarded for more serious work with dead-falls and traps taking its place in their extermination. After the Civil War and up until the smokeless cartridge came into its own, we don't find much evidence of it being considered a sport. Marmota was held in rather low esteem down thru the ages. Other and better game was in such abundance there was no need to hunt him. I well remember around 1908 thru 1912 when a magazine article now and then mentioned shooting them at 150 to 250 yards with the target Ballards, Remingtons, Stevens Ideal and

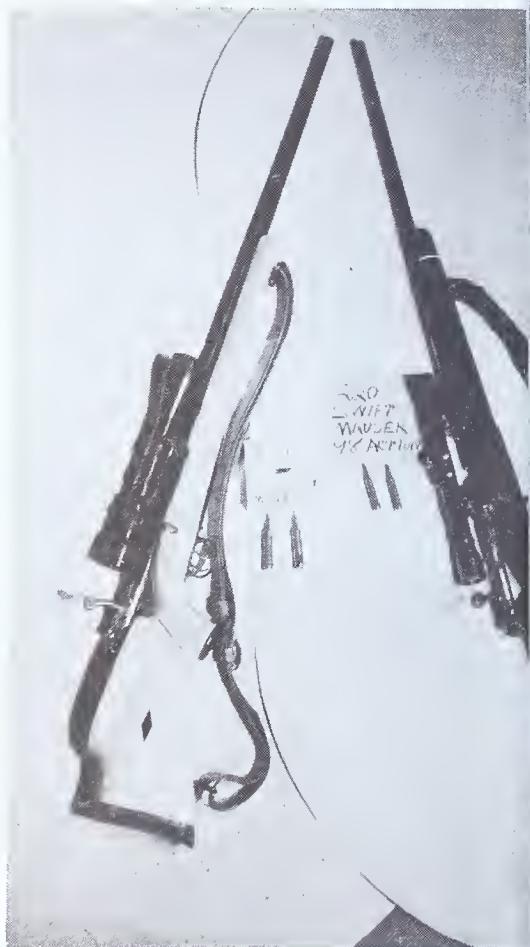
Winchester single shots in anything from the long 25/25 Stevens, 32/40 Remington thru the 38/55 Winchester and when they started using the 1903 Springfield they really had the tops. Newton came along with his 256 and other high velocity calibers around 1914. He was actually about 20 years ahead of the pack but the cards were stacked against him and he was unable to get into full stride. O. E. Neidner and Dr. Mann developed some good cartridges, one being the 25 cal. Krag. This was the 30/40 Krag case necked down to 25 cal. I owned one of these made up

RIFLE CLUB PRESIDENT Joseph Coviello of Scranton displays two of his favorite "super-dupers." On left is 220 Swift on Mauser 98 action with Johnson special barrel, Weaver KV scope. On right is 257 Weatherby Magnum with Bausch & Lomb Balvar 2 1/2-8 variable scope, birds-eye maple stock.



on a Winchester single shot action with a No. 3, 30-inch nickel steel barrel. Few today could beat this product of the old Maestro. As you can see the high velocity flat trajectory rifle put woodchuck shooting high on the list as a sport. The object of the hunt is to hit them as far out as possible. A good chuck hunter seldom takes one closer than 200 yards range. Head shots are possible at that range with 300 to 500 yard shots not unusual on large chucks in full view providing not too much wind. The 25/35 Winchester 22 Hi-Power Savage, 250/300 Savage and 30/06 Springfield were our best early woodchuck cartridges. They all came out between 1905 and 1915. The 250/300 is still going and is a splendid cartridge for crows, hawks, chucks and deer or black bear. It was our first commercially loaded 3,000 foot per second ammo in small caliber. The 30/06 is probably the most popular and well known cartridge in the world today. While unnecessarily powerful for woodchucks its wind bucking capabilities, great accuracy and flat trajectory qualifies it as a satisfactory woodchuck rifle with the 110, 125 and 150 grain bullets. The .110 grain bullet can be driven 3450 feet per second, the 125 to 3250 and the 150 to 3080. The 180 grain pointed boat-tail Sierra Match-king is designed for 1000 yard match shooting and is one of the best. This bullet is made in a soft point version and when driven near 2900 feet per second it qualifies as an excellent chuck load to over 400 yards range. About the only objection to this splendid 55 year old cartridge is its 15 to 18 pound free recoil and loud report which is disturbing to some. For the hand loader who uses one rifle and one cartridge for everything from vermin to moose this one is a good one.

Today we have an unlimited variety of calibers ranging from the little 22 Hornet, 222 Remington, both regular and magnum version, thru



CLOSE-UP VIEW of the two varmint rifles owned by Joseph Coviello. Both have double set triggers and leave nothing to be desired as chuck outfits.

the 6-MM's., or 243, 244 caliber to the Weatherby 300 magnum that may be used on chucks. In fact, many sportsmen who are able financially to hunt in far away places like the Western plains, Canada and Alaska, prefer to test the firearm and its cartridge, and scope on the elusive 'little-bear' of our mountain sides. They know any rifle that takes Mr. Marmot out to 200 and 300 yards will certainly qualify on a big-horn ram or antelope providing it is of suitable power. I personally have found any cartridge combination that blows a woodchuck apart out 200 yards will certainly do a satisfactory job on deer regardless of what some will think.



If we would ask 25 different woodchuck hunters what rifle, cartridge, scope and qualifications they would consider best, we would probably get 25 different answers. With this thought in mind I have mentioned only a few in a general way. A firearm is only as good as the fellow who uses it. A few even prefer the 22 long rifle high speed hollow point for chucks. Such hunters are usually good stalkers and try for head shots at not more than 75 to 100 yards. Marmota is tough and possesses great tenacity of life. If he is hit in a non-fatal area he crawls in and dies a long drawn out lingering death. No sensible hunter enjoys

this type of hap-hazard hunting. The 22 rim-fire is not a good woodchuck cartridge, however.

Unless you have a farmer friend who wishes all woodchucks exterminated on his farm don't start killing a lot of big old chucks in May. You will end up destroying not only a lot of mother chucks but their young as well who are usually quite unable to care for themselves. Lay your hunting plans in May, encourage the friendship of your land owners and enjoy a keen sport throughout the balance of the summer and early autumn. With the increase in hunting of this marmot you will find him testing your ability to the limit.

## GUN CARE

Grease in the chamber of a firearm, especially a center fire rifle, is an invitation to trouble. This builds up excessive pressure and can readily cause burst cases and in extreme instances serious damage to the firearm. Too much oil can result in similar accidents. Rifle or gun barrels should be wiped out to rid them of oil or grease before use. And—don't stand a firearm on its butt with barrel heavily oiled and leave it that way as oil runs into the action. Too much oil in the action slows down the springs, collects dirt, freezes in cold weather, weakens the stock, and, perhaps worst of all, squirts in your eye!

## OUT-OF-SEASON DEER MORTALITY STILL HIGH

The reported loss of deer in Pennsylvania from various causes remained high in 1958. The total number of which the Commission has record was 14,841. This was but 372 less than in 1957. The number of deer reported killed for crop damage was 80 fewer than in 1957, and the highway kill was 369 under the 1957 figure.

But miscellaneous deer deaths—such as those caused by dogs, by running into fences, jumping from cliffs and other accidents—increased by 577 during 1958. This was due in part to heavy snows, early last year, which permitted logs to make greater inroads into the deer in some localities. Comparison figures for the last two years follow:

	1957	1958
Crop Damage .....	2281	2201
Vehicles .....	9262	8393
Miscellaneous .....	3670	4247
Total .....	15,213	14,841



# Tournament Archery

By Tom Forbes

**P**APER work is the bane of all archers. Classification records, registration and compiling scores at tournaments, preparation of tournament schedules—each of these chores places a heavy burden on club secretaries and tournament committees. This is the work that occupies the time of club officials during the winter months when the field course is covered with snow and only a few hardy individuals shoot their favorite field course. The annual clean-up has been completed. Work parties have labored over several week ends to renovate the field course and repair the damages created by the winter storms. Butts have been rebuilt, trails cleared and fresh target faces placed on the butts for the first open shoot of the season.

Competition is an essential in-

gredient of any sport. Individual excellence is an incentive that drives us to strive for improvement of our ability to hit a chosen target. As novice archers we are reluctant to shoot in company with or under the eyes of experienced bowmen and we attempt to master the problem of shooting a bow alone, promising ourselves that we will seek out the company of other archers when we feel that we will no longer draw attention to ourselves by our feeble efforts. Fortunately such an approach to the game of archery is unwarranted and detrimental. Every newcomer to the sport needs instruction in the technique of shooting the bow if he is to acquire any proficiency in its use. Every experienced archer is indebted to his fellow archers who have spent time with him to see that he learns proper methods of shooting from the start. Good shooting form is easy to learn and poor shooting form difficult to correct. Every archery club is interested in obtaining new members and a definite part of every club program is instruction for beginners.





Frequently classes for beginners are held indoors during the winter season. Every club however, is interested in teaching the fundamentals to beginners and you will find a warm welcome awaiting you at your nearest archery club.

In the selection and purchase of your initial equipment you should delay until you can have the advice of an experienced archer. Much of your early success will depend on the proper selection of the equipment and the beginner can not be expected to be able to make the proper selection. You can rest assured that you will save money too.

The Central governing organization of Pennsylvania Archers is the Pennsylvania State Archery Association. The 1959 Tournament Calendar lists 151 member clubs. They are scattered all over the state and there should be at least one and sometimes several clubs located within easy driving distance of your home.

In order to provide competition on an equitable basis, all archers are classified in accordance with their ability and in tournaments they compete with those in their class. Contrary to what the beginner may believe the majority of archers compete in the lowest class. There are relatively few experts. There are five classes: Archer, Bowmen, Expert B, Expert A, and Expert AA. State wide, one-third of the members in the archery clubs shoot in the lowest class. Only 45 out of a total of 3294 have qualified as Expert AA, which is the highest rating.

If you shoot a bow and do not belong to an archery club you are missing a lot of good fellowship among people who enjoy archery and the fellowship that accompanies the sport. The location and address of the Secretary of your nearest archery club can be obtained by an inquiry directed to The Pennsylvania State Archery Association, Inc. Clayton B.

Shenk, Executive Secretary, Ronks, Lancaster County, Pennsylvania. You may become a member of this association by application and payment of yearly dues of \$1.00. A membership in this association entitles you to shoot in Regional and Championship Tournaments. The monthly NEWS LETTER of the association will keep you advised of the archery program and subjects of interest to archers. Club shoots are restricted to members of the club and are generally held weekly throughout the shooting season. Each club also holds a number of open shoots in which non-members may participate.

To get the feel of tournament shooting most novices begin at the club level and take part in a club shoot. The procedure is simple. You will find a registration desk in operation on the day of the shoot. At the desk give your full name and address and state that you are a novice who is unclassified. Pay your registration or entry fee for the shoot and request a temporary classification card. The charge for this card is 15 cents if you are a member of the PSAA; otherwise the charge is 30 cents. You will be assigned to a target with three other archers and since you are a newcomer to tournaments care will be taken in the assignment to insure that you will feel at home in the company of your shooting companions. When the registration has been completed, an official will call out the names of the archers assigned to each target. When your name is called take note of the archer to whom the score cards are given and identify yourself to him. He will collect the group and proceed to the assigned target. The shoot begins when a signal is sounded which can be heard over the entire course. The target captain will assign the order of shooting at the first target, thereafter on the succeeding targets high score shoots first, next highest second,

etc. Generally you will find yourself shooting last and it gives you a good opportunity to observe the procedure the archers follow at each target. Courtesy and safety are emphasized and practiced. Advice if solicited will be freely given and you can learn by a willingness to accept instruction to improve your scores.

At the conclusion of the tournament scores are totaled and the target captain turns in the cards at the registration desk. Scores are verified and posted. Winners are announced in the different classes and awards presented. Finally your name will be called as classification cards are returned to the owners and you will be presented with a temporary classification card based on the score you shot in the tournament. In due course you will receive through the mail an official classification card from the central classification office of the Pennsylvania State Archery Association. Be particular about your name and mailing address; check your temporary card to see that they are correct.

With the tournament season in full swing it would be possible to attend an open tournament every week end from now until the fall hunting season opens without visiting the same club twice. To avoid scheduling tournaments on the same date so that they compete for participants, a number of clubs in an area will form a league and will draw up a schedule of tournaments for the member clubs. The Pennsylvania State Archery Association schedules Championship shoots in each of the six regions into which the state is divided and conducts State Championship Shoots in both Target and Field Archery in the early fall. Competition in these championship tournaments is limited to members of the association. The current Pennsylvania Field Champion is Robert Kaufhold, Jr. of Neffsville. The Ladies Field Champion-

ship is held by Nellie Baer of Reading. The Ladies State Target Champion is Carole Meinhart of Pittsburgh, former World's Champion, and the leading target archer is Charles Hein of Pittsburgh. These target champions are both members of the Pittsburgh Archery Club. There are two national organizations which hold national championship tournaments. The older is The National Archery Association of the United States, whose 75th Diamond Jubilee Tournament will be held on the grounds of Franklin and Marshall College at Lancaster, Pennsylvania from August 17 to August 21 inclusive. Events will consist of Flight, Target, Clout, and Team competition. At last years National Target Tournament held at St. Paul, Minnesota a flight arrow traveled 705 yards and two feet. Using a foot bow an arrow reached the 790 yard mark. The 14th Annual National Field Archery Association Championship Tournament is scheduled for July 27, 28, 29 and 30th at Bend, Oregon. Pennsylvania Field Archers will attend and some of them will fly on a plane chartered by BOWHUNTING magazine. Last year this shoot was held at Grayling, Michigan and the defending champion was Jay Peake from Charleroi, Pennsylvania.

Don't be a loner. There is a place in organized archery for you where you can enjoy the companionship of fellow archers who shoot at your level. The Champions are few in number and the club's success depends on the rank and file who are by no means experts.

An archery club is a family affair. All ages shoot, both men and women. Many clubs offer play areas for the toddlers, picnic tables for eat outs and other recreational features. Visit the clubs in your area and choose one that meets your own specifications. You will be a welcome guest.



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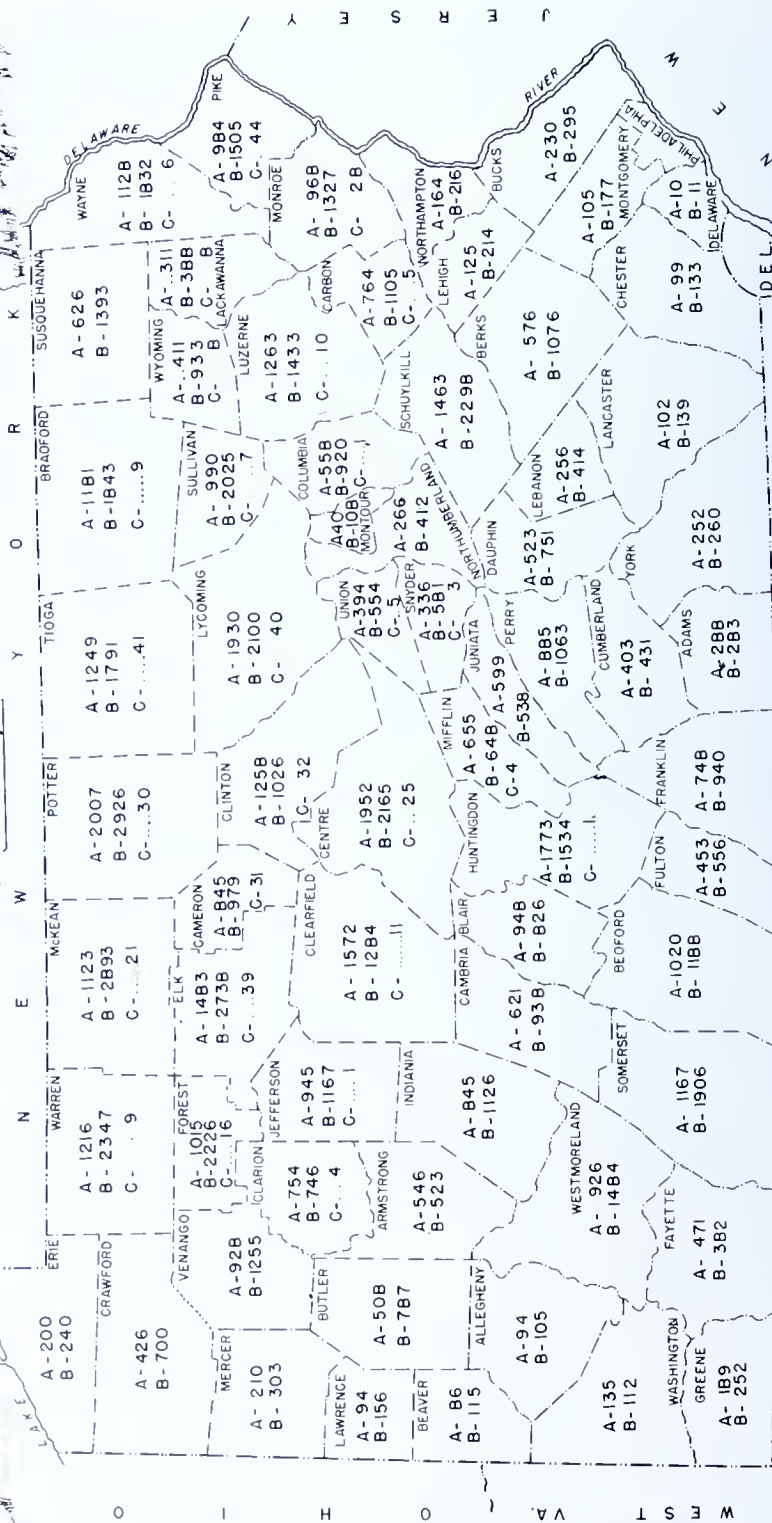
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# 1958

## DEER & BEAR HARVEST

### PENNSYLVANIA GAME COMMISSION HARRISBURG, PA.



WEST VIRGINIA MARYLAND DELAWARE

—KEY—  
 A - LEGAL ANTLERED DEER HARVEST (By tag count)  
 B - LEGAL ANTLERLESS DEER HARVEST (By tag count)  
 C - LEGAL BEAR HARVEST (By tag count)

TOTAL - LEGAL ANTLERED DEER HARVEST 46,738  
 TOTAL - LEGAL ANTLERLESS DEER HARVEST 65,187  
 GRAND TOTAL 111,925



PENNSYLVANIA

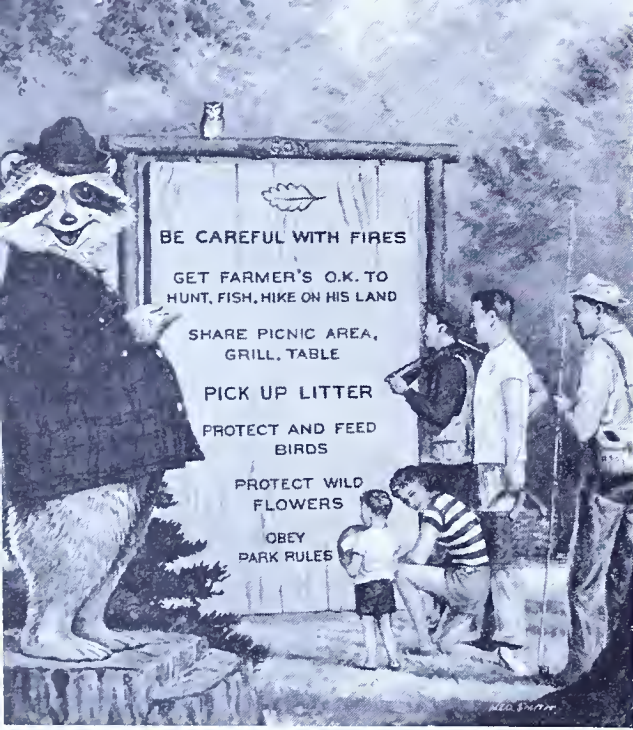
# GAME NEWS

JUNE, 1959

TEN CENTS







# THE STORY BEHIND THE COVER

**F**OR the outdoor recreation enthusiasts portrayed on this month's cover, the commandments engraved on the forest sign hold special meaning. Many more could and should be added to the list. But basically they all narrow down to good outdoor manners—common sense rules of courtesy and respect that characterize every true sportsman and conservationist.

But for more than 50,000 Pennsylvania school children, the brightly dressed raccoon has now become a symbol of every outdoor good manner. Like his big brother, Smokey Bear, this little game animal has been named in a contest recently concluded by the Pennsylvania Forestry Association. You will find his name announced elsewhere in this magazine.

Behind his name have gone thousands of ideas, hours of work, loss of sleep, and downright devotion to a cause. From the start of this unique educational contest last January, Pennsylvania's youngsters have taken the raccoon into their hearts and minds. Over 450,000 bookmarks containing the official entry blanks and a miniature cut-out of the raccoon were mailed to every county of the Commonwealth. In at least two counties, there was one entry for every three bookmarks mailed out. Over 1100 organized groups—biology classes, 4-H clubs, scout units, grade school classes—pooled their thinking and selected one name for their official entry. In Luzerne county the Chamber of Commerce and Garden Club conducted a local contest in addition to submitting names in the statewide contest. The greatest number of entries came from Allegheny County, showing that city kids as well as country kids were interested in naming the raccoon—and in learning more about good outdoor manners.

The final results of the Association's contest can never be measured by a name. This has been but a means toward the end. The real success will be judged years hence by how well Pennsylvania's citizens conduct themselves in pursuit of outdoor sport and happiness. As time tears by in the space age, the chance to find peace on earth through hunting, fishing, hiking, camping, picnicking, boating and all other ways of spending leisure hours will largely depend on how well we get along with nature and with ourselves. Those who have good outdoor manners will always find recreational opportunity. If each of the school children and through them, their families, have developed a better sense of courtesy, thoughtfulness and respect, then the future of outdoor sport is that much brighter.



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Commonwealth of Pennsylvania

DAVID L. LAWRENCE, *Governor*

★

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## PENNSYLVANIA GAME NEWS

Will Johns .....Editor

Zelda Ross .....Circulation

JUNE, 1959

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Cover Painting

By Ned Smith

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## PENNSYLVANIA FORESTRY ASSOCIATION ANNOUNCES WINNERS IN CONTEST TO NAME GOOD OUTDOOR MANNERS RACCOON

The Pennsylvania Forestry Association in cooperation with nine other conservation agencies of the Com-

monwealth has named a first-grade boy from Charleroi in Washington County as winner in a contest to name a **GOOD OUTDOOR MANNERS RACCOON**. More than 48,000 school children competed in the contest which began last January and ended on March 15.

John Hayes, of 200 Arlington Avenue, Charleroi, a pupil at the Second Street School, won a \$200 U.S. Savings Bond for picking the name "Howdy the Raccoon." John chose the name because the raccoon "Welcomes you to his home, the forest, if you obey the rules of a good guest."

Other prize winning entries were submitted by:

### 2nd Place Award—\$150 U. S. Bond

Stephen Sabulaky, R. D. 2, Pulaski, Pa. West Middlesex Point Consolidated School, Grade 2, Pulaski, Pa.

### 3rd Place Awards—\$100 U. S. Bond each

Eddie Mastreau, 712 Kerr St., Ambridge, Pa. Liberty School, Grade 6, Ambridge, Pa.

Karen Bowman, 1813 12th Ave., Altoona, Pa. Keith School, Grade 9, Altoona, Pa.

### 4th Place Awards—\$75 U. S. Bond each

Kenneth Dawe, 417 Mountain Ave., Pen Argyl, Pa. Pen Argyl Joint High School, Grade 9, Pen Argyl, Pa.

Virginia Moore, 1063 E. Alcott St., Philadelphia, Pa. Philadelphia County Fels Junior High, Grade 9B.

### 5th Place Awards—\$50 U. S. Bond each

Byron A. Leiby, R. D. 1, Tamaqua, Pa. Breiners School, Grade 4, Tamaqua, Pa.

Carolyn June Exton, R. D. 1, Conneaut Lake, Pa. Conneaut Lake Area School, Grade 10, Conneaut Lake, Pa.



*My name is*  
**HOWDY**  
**THE GOOD OUTDOOR**  
**MANNERS RACCOON**





Editorial . . .

## Like Father - Like Son?

**L**IKE father—like son . . . chip off the old block . . . spittin' image of his old man . . .”

All these common quotes from the American vernacular seem to express a very close and personal relationship between fathers and sons. But in this day and age, do they really ring as true as once upon a time?

We live in an era of organized activity and guided living. The manner in which the “childrens’ hour” has been carefully planned is viewed by most parents with pleasure, sometimes mixed with complete amazement. Even before school starts in the morning, there may be band practice or a club meeting. Children no longer return home for lunch, even those living a few blocks from the school. The afternoons are often a mad race from athletic practice to club meetings. The evenings involve midget football or baseball, scout meetings, teen canteens and other similar diversions.

At the same time, similar schedules are being followed by a good many of these same parents who ride the merry-go-round of church, civic and social commitments. The password to the American way of life seems to have changed from “freedom” to “the meeting is now called to order.”

Most authorities consider such split-second timing and organized activity essential to survival in the space age. Yet lives there a man with soul so dead who more than once has said, “Don’t just do something—stand there!”

This does not mean rebellion against the many good works and worthwhile values exemplified by schools and scouts, athletics and social groups. Rather it expresses a fond memory of the days when youngsters were relatively unorganized—when kids just went outside of an afternoon or a Saturday and did “nothing.” Nothing was everything from catching tadpoles to building castles (of orange crates, of course).

And at no time was “nothing” better accomplished than when fathers were together with their sons, enjoying the same games or hobbies or discussions. All of this time involved training, whether or not it was recognized as such. And in no field was the relationship more beneficial than outdoor life and recreation. The sportsman father can and should pass on to his son the knowledge, skill and techniques which are part and parcel of hunting and fishing.

Days afield for fathers and sons can mold the future of outdoor sport in a pattern as old as mankind itself. It’s a pattern which is easy to bypass but for which there is no completely satisfactory substitute. Take time to be a real father to your boy!

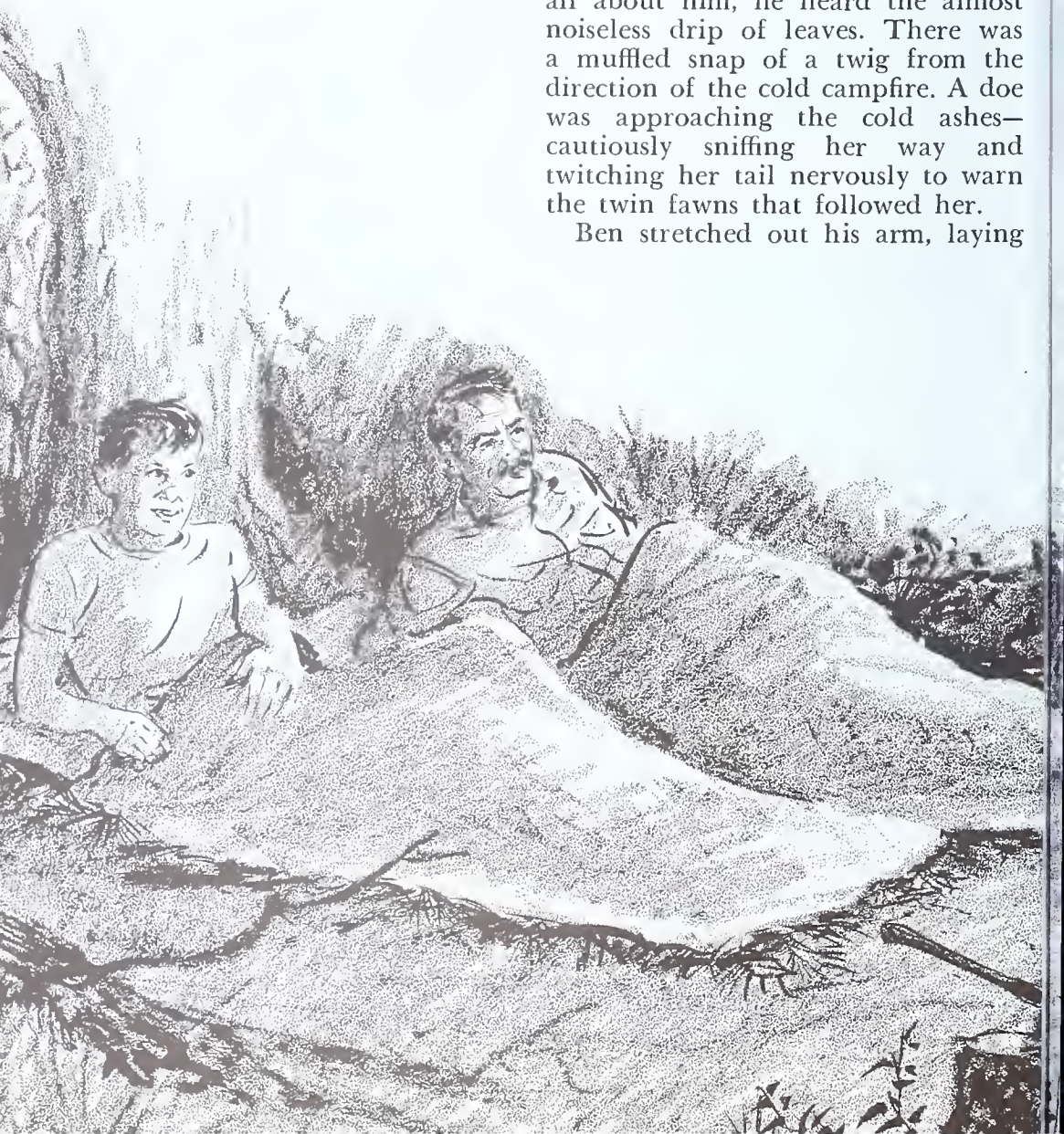
# "Livin"

By Paul A. Matthews

Illustrated by G. Don Ray

**B**EN Holcom pulled the blankets closer to his chin in an attempt to shut out the dampness that enveloped the ridge in its usual wraith-like mist. It was early morning—better than an hour before the sun would lift itself above the wood-studded crags of the Buckhorn—and all about him, he heard the almost noiseless drip of leaves. There was a muffled snap of a twig from the direction of the cold campfire. A doe was approaching the cold ashes—cautiously sniffing her way and twitching her tail nervously to warn the twin fawns that followed her.

Ben stretched out his arm, laying





his hand on Frank's shoulder with a firmness that stirred the boy from sleep, and then held him quiet until he was fully awake. Ben nodded in the direction of the deer, letting Frank come to a half-sitting position. When the boy spotted the deer in the foggy starlight, his eyes protuded from their sockets, and the chill dampness that had seeped through his body during the night was overwhelmed with the heat of surging blood. On the opposite side of the glade, Lyle had stirred David, and that lad too, was living a rare experience—a simple incident that strengthened the bond between father and son.

The doe stretched her neck to its extreme, barely touching the coals with her nose, and then she moved on behind the small pile of black toward another figure huddled in the depths of wool blankets. She nuzzled her nose in the fabric, recoiling with stark terror that was punctuated with

a series of snorts and the pounding of delicate hooves as the trio left the campsite.

They came to life then, the two men and three boys sleeping out in the weather while sensible people still enjoyed the musty odor of paints and waxes and other refinements of modern living.

As they settled into their given chores of building the fire, collecting wood, carrying water from the creek, and the little miscellaneous jobs of folding blankets and preparing breakfast, the fog billowed up from the river valley, oozing its way through the hemlocks like dust motes in a shaft of window light. And for maybe thirty seconds—while the others were obscured from view,—Ben reminisced of the past. He visualized a similar morning twenty-five—possibly thirty years ago when the Old Man had introduced him to one of the finer arts of life—that of living!





Yes, the Old Man had a way of polishing the simpler incidents of life so that throughout the years, the dim glow of memory never lost its luster.

Ben still recalled the Saturday afternoon in the latter part of August. The laziness of summer had fermented, frothing the atmosphere with a tang of early fall, and drowning the monotonous, humdrum buzz of the cicada. The fruits that had apparently lain dormant since the disappearance of spring blossoms were beginning to take on inviting colors; the purple concords, the pinkish-white of peaches, and the smooth, waxy redness of mackintosh.

Ben sat on an overturned bucket, poking at the dust with the sharpened end of a stick, while deep within him, the yeastiness of summer had at last begun to burst into activity. He stirred with an uneasy restlessness.

And then somewhere up the hill road, there was a roar of an internal combustion engine minus the muffler, and the metallic clatter of loosely bolted sheet metal bouncing along the rutted road. The Old Man's Model A had a distinctive sound of its own.

Seventy-five feet shy of the house he applied the foot brake, supplemented it with the emergency brake,

bringing all four wheels to a standstill and jolting the coupe to a dusty halt. There was an urgency in his pace as he went inside the house, sweeping off an old Spanish-American War campaign hat to expose a frousy mass of silvered hair.

Ben's mother had also heard the Ford coming down the hill and had a glass of chilled buttermilk waiting on the table when Ben and the Old Man came in the door.

"Afternoon, Miz Holcom," the Old Timer said.

"Hello," she replied simply.

The Old Man drained the glass hurriedly, pulled at the end of his mustache thoughtfully and said. "Miz Holcom, I want to take Ben campin' tonight."

"Camping? Out in the woods? All night?"

"Yep! 'Fore long the lad will be growed up, an' there's a few things he ought to do now 'fore he reaches the point in life where such things appear childly. Alls he'll need is a couple blankets. I've got the rest."

So the two of them, an old man in his sixties and a young lad not yet in his teens, went camping.

From the rumble seat of the Model A, the Old Man produced a rucksack which he swung on his shoulders as though it was part of his dress, and a blanket roll that rested atop of the sack with two strings coming over his shoulder and fastening to his belt. Ben's eyes bugged with enchantment when the Old Timer strapped on a wide leather gun belt and slid a flat-top Single Action into the well-worn holster. And then they headed toward the Buckhorn, following an old log road that gnawed its way up the hill, across the razor-back ridge to peter out in the slashing a half-mile shy of the Goose Hollow creek.

They forced their way through the slashing into the tall hemlocks that graced the banks of the gorge, and followed the creek upstream to where it forked at the split in the hollow.





Between the two branches of water, there was a high ridge of land, and it was here that they made camp.

"Don't ever camp in a creek bottom," the Old Man warned. "If'n a cloudburst don't come up in the middle of the night and carry you off, the skeeters will."

He taught Ben to clear the ground of stones before placing hemlock boughs on the spot where he was going to bunk down for the night, and then they cleared a good six-foot radius of all leaves—right down to the bare dirt. In the middle of the bare area, the Old Man scooped out a shallow depression and built a fire of dead hemlock twigs topped off with larger pieces of dead chestnut. He didn't build a large fire—just a small one that took off the damp chill of evening and at the same time filled the depression with a thick layer of hot coals. They put potatoes and onions near the edge of the coals, wrapping them first in aluminum foil that the Old Man had salvaged from empty cartons of tea. "That keeps the jackets from burnin'," he explained, "and at the same time allows the spud to roast so's it'll be just as fluffy as one your mother takes out of the oven."

He had a coffee pot, fashioned from a two-quart tin can and a piece of bailing wire, that he suspended over the fire, and while the fluid inside simmered with heat and collected bits of char and smoke flavoring, he dropped eggs and beef in the skillet.

As any outdoorsman knows, it is a true artist who can maneuver around a campfire holding a hot skillet and dodging the ever changing smoke at one and the same time. And though the Old Man was somewhat of an artist, there were times when Ben noticed the smoke-brined tears being dissipated amongst the two weeks growth of grey whiskers.

"Ain't nothing better than woods-cooked vittles," the Old Man said.



"It has flavors that nobody has learned how to bottle up like you can salt an' pepper, an' somehow—even years from now—you'll be able to think back an' fairly taste this meal!"

Young Ben grinned, and then deftly maneuvered a hot potato on the tin plate and proceeded to turn it wrong-side out, scraping the light fluff away from the hide. They used the grease from the skillet to flavor the potatoes with, along with a sprinkle of salt and pepper from the container that the Old Man had fashioned from a section of cane bamboo. And long before the eggs were done, the Old Timer had scrambled them with the blade of his sheath knife, remarking that "soft-fried eggs are rather 'dele-cutt' to handle in the woods!"

Ben Holcom never forgot that night he spent in the woods with the Old Man—nor any of the following nights either, for there were many of them. He could still remember—thirty years later—the lonely, melancholy whistle of the whip-poor-will coming from afar off, almost pleading for recognition. And then from the depths of his rucksack, the Old Man had produced a harmonica. The old time selections have never since had quite the beauty they had that night, and yet sometimes, when Ben stared into the embers of the fireplace at home, he visualized the Old Man sitting there on the far side, elbows propped on his knees, his eyes half-closed, and the whole upper half of his body moving in slow rhythm

to "Twilight is Stealing, Swift o're the Lee—."

Into the far hours of the night, Ben had listened to the Old Man whittle out one tune after another, and in the background, there was a constant chorus of crickets, katydids, and teeming thousands of other insects. The woods were alive—another world separate and individual.

"Listen to 'em out there," the Old Man had said with a broad sweep of his arm. "Listen to 'em singin' an' enjoyin' life—not even knowin' that there's such a thing as man! That's their Broadway, Ben—their bright lights—their boulevards—their cellar cafes. And most of *us* live a lifetime without realizin' it. When we have a forest fire, we measure the loss in so much timber, or so many dollars an' cents. We never stop to think of all the little creatures we've destroyed an' how we've upset the balance of nature in that particular area. We don't realize it Ben, because we don't often take time to enjoy it. Livin', Ben, is something more than seeing how much money you can accumulate, or how high you can climb on on the social ladder. It's the art of being able to enjoy and appreciate the little things that we have for almost free."

It had taken Ben years—yes almost thirty of them—to fully grasp what the Old Man was driving at that night. But he had called it right. People had lost the art of living. Of course, nowadays they call it by a fancy phrase, 'the instability of juveniles', and they offered all sorts of excuses.

But the real trouble, Ben knew, was that there just wasn't enough *Old Men* left to take the kids out and show them how to really live.

\* \* \*

By the time they had finished their breakfast, the fog from the valley had been wiped away, leaving the trees clean and fresh for another day. Half a mile away on the river flats, they heard the farmers herding the cattle into the barns for the morning milking, and from one point, there was a hoarse cough of a tractor and the metallic clatter of machinery.

Lyle and Ben taught the boys the importance of dousing the fire with water, and that in the woods, a courteous man always buries his rubbish. And as they drove home, Ben somehow had a strong feeling of satisfaction. These boys had seen and heard and learned, just as he had thirty years ago.

## TREES and GAME—Twin Crops

The Tree Farm program of growing trees as a crop holds the key to material increases in wildlife resources as well as to the nation's wood supply, according to Arthur H. Carhart of Denver, well-known outdoor writer and conservationist, author of a new booklet, "Trees and Game—Twin Crops."

"Trees and wildlife live together on nearly half a billion acres of commercial timberlands in the United States," Carhart said in the new publication. "A great many of our animals and birds require forest environments for food and shelter. The value of natural resources lies in mak-

ing wise use of such wealth. Therefore, wise management of timber and of game is directed at the production and harvest of each as a crop—indeed, they are twin crops."

Carhart said well-planned management of timberlands means two things of prime interest to sportsmen. First, in most instances, it assures high levels of production of both wood and wildlife. Second, it is the best prospect of sustained yields in both resources.

Carhart emphasized the importance of keeping wildlife populations in balance with the ability of timberlands to feed them. He cited several instances of major deer die-offs brought on by overpopulated herds.





# Teach That Boy To Wonder

By Robert R. Bowers

Photos by Author

**A**T the age of four years, the world is full of wonders. It must be a delightful time of life, because everything is new and exciting; each day a whole new adventure. The song of a bird; the growth of a plant; a rabbit's nest filled with cotton-covered bunnies. Each of these things strikes the imagination of a youngster and it starts him to wondering. And to wonder is to inquire and to inquire is to learn, and like so many other boys and girls his age, my son Mike knows an awfully lot about nature for a boy so young.

It is funny to me how so many adults forget their early fascinations. It often takes a youngster to make us

again realize just how exciting the ever-changing world around us is. In my case, Mike helped me realize those childhood memories and together we renewed my appreciation of the wonders which I had begun failing to notice.

It has always been my fondest hope that my son would grow up loving the outdoors, as I had learned to do. Since Mike was two years old, every opportunity has been used to encourage him by pointing out new "mysteries."

Last winter when the snows were heavy and deep, a time when most boys are couped up in their homes and frustrated by inactivity, Mike



FEAR OF INSECTS which normally engulf youngsters has been overcome by Mike. Through careful guidance by his parents, he has substituted interest in place of fear.

and I had our greatest lesson in outdoor education. It was about noon time, when a large black cat ran a rabbit out of our back yard. Mike saw the bunny running past the house and into an adjoining field. Putting on our wraps and boots, the whole family of us took off in search of that one rabbit. Mike was excited as I pointed out the variations in the rabbit's tracks, as it hopped and ran and rested. He wondered how anything could get through the brush we shoved aside in our trailing. During the trip I explained that such animals use heavy brush to hide from cats and dogs and people, as well as keeping the snow off them during bad weather. During the day we trailed that cottontail nearly a mile, but never once did we see him. But along the way we could see freshly clipped off maple sprouts which the sharp incisors had severed. We found too where other rabbits had been hopping about and the trails crisscrossed back and forth.

On our way back home, a large flock of cedar waxwings landed in the high privot hedge near the house to feed upon the buds and Mike was thrilled as he walked up to their feeding grounds without frightening them off. During the course of trail-

ing one rabbit, Mike had touched upon tracking, foods, cover and numerous other habits of wild birds and animals. And every single observation, supplemented by a comment or two of explanation, was new and alive and exciting to his fresh young mind.

All of this enthusiasm started off quite accidentally in our family, but it seems so natural now that I often wonder what other kids do for excitement. An acorn fell off the large white oak tree in our back yard. The small nut hit Mike on the head and he began to cry. Trying to console him, I explained that dropping acorns was the oak's way of planting other oaks. Mike was enthralled.

"Why do oaks plant acorns?" he asked.

"To raise a family of oak trees," I explained.

"How do the trees raise a family?" he asked curiously.

So, to make it more clear, I placed the acorn in a glass jar of water where we could watch it sprout and grow. And every morning Mike was there to see if "I gotta big oak tree."

In trying to reconcile him about not having a 200-year old oak in a couple of days, I looked for other mysteries to distract Mike's inquiring mind. One evening while we walked among the tall seedlings growing down in the valley, we heard a bob-white quail call to its mate. Right away, Mike decided that he would like to whistle just like a quail. Now that's a pretty big order for a boy who can't even whistle at all, but he practiced that call for nearly a week before his interests turned to new fields to conquer.

Our back yard is a pretty large area, so shortly after moving in we planted 150 white pines in the lower section. We planned to keep the trees pruned for future Christmas decorations. Soon after planting, however, a problem arose which at the time seemed hopeless of solution. Mike broke the needles everytime he



walked by the plants. Hand slappings and repeated scoldings did little good. Then, I noticed that Mike, as he ambled through the small plantation of pines, came to each tree, and caressed the tender new shoot lovingly. Maybe, I thought, here was my answer to the needle damage on my trees. Obviously, the young boy had a deep-seated urge to possess them. So, I asked, "Mike, how would you like to own those little pine trees?" His round face brightened. "Mike," I said, "they are all yours. I give them to you for your very own. But remember, it will be up to you to protect them from getting hurt."

Since that day three years ago, Mike has not broken a needle, nor have his small friends. He protects those seedlings at any price, which once resulted in a bloody nose from a slightly indignant pal, but the pines are doing fine.

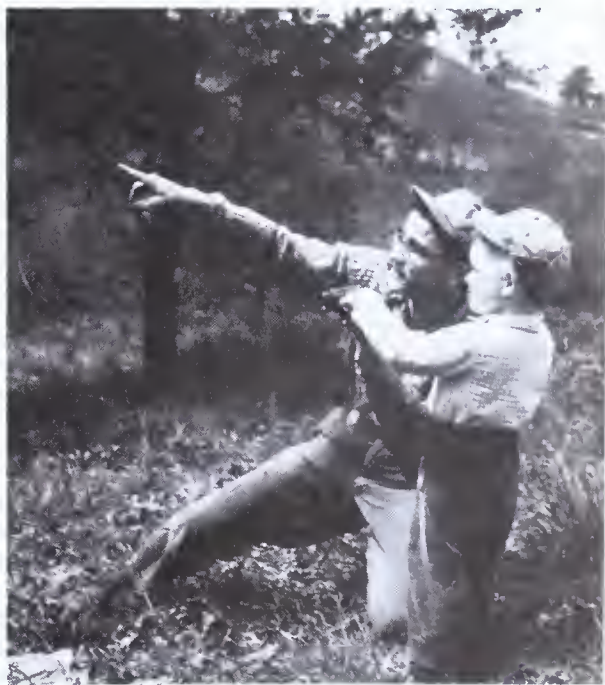
Every day my son's increasing love for living things amazes me. And I wonder how so many people overlook this natural instinctive love for plants and animals in children. Our backyard allows plant and animal life to run rampant. Flora and fauna are abundant and versatile, serving as an outdoor laboratory where all the wonders of nature are exposed. It is the brushpile where "Charlie Cotton-tail" makes his home, and the multiflora rose hedge where the bobwhite quail calls each evening. It is the bluets, buttercups and violets that come up in spring; and where "God makes it rain when the plants are thirsty." It is the oak where the robin makes her nest and raises her young, and where the sassafras "tastes pretty."

Through association, Mike knows the rabbits like plantain to eat, and that they live in the brushpile we made from the cut brush. He has seen the tracks of the cottontail coming in and out of the brush, and has sat for an hour at a time to watch the bunnies nibble the large flat leaves of plantain.

Clearing off a portion of our back lawn to make room for my own chosen varieties of plants, the most fascinating "living attractions" were destroyed. This, of course, was the rabbits, which left when the cover was cut. In order that this short-coming of our wild area could be restored, a multiflora rose hedge was planted around the lawn, where rabbits and quail could find protective shelter for travel lanes and keep away from roaming cats and dogs. Soon after our planting, the wildlife came back in force.

It seemed for awhile that everything was going fine in our backyard wildlife schoolroom. The plantings were versatile and wild birds and animals flourished, but of course everything has its drawbacks and our lawn certainly did. It hadn't been considered that rabbits often eat more than just clover, otherwise the gladioli wouldn't have been planted where they were. Rabbits cut them down in wind rows immediately along the grass line. It happened that my wife had been admiring her

**BIRD IDENTIFICATION** is a natural bond between father and son. Binoculars help a boy to wonder, after the distant object is first located.



particularly beautiful, deep red flower from the kitchen window, when one of our rabbit friends hopped alongside it. While she watched, the bunny chomped his double-pair of incisors into the stem of the tall flowering plant and it fell like a forest giant before the axe. The humor in that episode was not shared equally between my wife and myself, and thereafter we planted our flower garden closer the house.

Then, of course, there were the neighbor's tomatoes, which the rabbits dearly loved as they turned ripe and juicy. Pepper plants were clipped to the ground on the evening had been planted.

Convincing one's neighbors that rabbits were worth their trouble was not an easy job, especially since they were suffering all sorts of depredations to their gardens and lawn

plants. The children, however, convinced them. Young bunnies hopping foolishly around the backyard, with the old mothers kicking up their heels so entertained the youngsters that the parents' resentment melted.

It seems to me that every boy and girl is entitled to have a chance to learn about birds and animals, along with the multiple variety of plants which exist in any community. It is unfortunate that some people don't have at least a large lawn to point out life's great "mysteries" to their youngsters. It is for this reason that I have long advocated such things as "community forests" or "school forests" and wildlife areas. Yards and these forests are living things to children, if we will let them be so. And fascinations found here bring classroom lectures and textbooks to life for curious kids. And the lust for

ROOT SYSTEM of a tree is explained to Mike by his father. The boy can then readily understand how the tree is fed and anchored.





a spiritual life that comes to "children only" from nature's gardens is inherent in people from the time they are born. It often needs a small amount of cultivating by the grown-ups but basically, youngsters love the outdoors. And for adults, such backyard time spent with the boys and girls can release those tensions we sometimes pick up in our ever-accelerating tempo of everyday living.

I believe that my son Mike is the living proof that a child can just as easily learn that a plant is an "oak" as well as he can learn that it is a tree. I believe that nearly all boys and girls, when old enough to walk and talk can teach themselves, through observing and through questions, how nature works for and against mankind. Mike is now five years old, but his curiosity is increasing everyday, as is his ability to observe and "think up" confusing questions which I have to look up to answer. He knows that the bird on our redwood fence is a "thrush," and that the base plants around our house are cedars. He knows that cedars stick his fingers, and that the "pine trees" are green all winter. He also knows that acorns come from oak trees and drop their leaves each fall, and that squirrels love to eat



PRAYING MANTIS EGG CASE was observed, then placed in a bottle where it hatched. More than 200 of the tiny mantids emerged.

the acorns which fall in our yard.

Mike has watched a blue-tailed skink which lives in our rose bed, and through watching it and chasing it he has no fear of its bite as he once did.

To me, it is a wonderful thing to watch a boy grow up among his earthly possessions and find enjoyment in each facet of them. One wonders when he watches a five-year-old's childish love for such things if perhaps it isn't here that our answer lies to all our basic conservation problems.

## CONSCIENCE FUND FOR GAME MANAGEMENT INCREASED

Occasionally the Pennsylvania Game Commission receives money from a person who has "gotten religion" or whose conscience has deviled him to the point he seeks relief by contributing (anonymously) to the Game Fund. A handwritten letter, received by the wildlife authority in Harrisburg last month, read:

"As I look back over my past life I see times when I have broken the law. Some were mistakes that I should of reported to the warden. But I did not—this may of been 25 years ago. I killed 2 doe mistaken for bucks

which I did not report but left them lay in the woods to rot or feed other animals and that happened in the Ridgway area. I also killed a deer after 5 o'clock in season. To clear my conscience that I may stand clear before God in the day of judgment I want to make this confession to you, also to make better hunting in the future. Put this \$100 in the Fund for better game."

The cancellation stamp on the envelope revealed that the letter, in which was a crisp \$100 note, was mailed from southwest Pennsylvania. It was signed "A reader of the GAME NEWS."



## "Timmie"

By Robert S. Dow, D.D.S.

Illustrated by Nick Rosato

**T**HE morning dawned cold and gloomy. Not peculiar for Northern Arkansas in early January. I was standing knee-deep in water, under a Pin Oak tree. Rain was falling intermittently. Temperature was in the high twenties. Yet it was cold enough that each rain drop falling from the withered leaves, reminded one of syrup dripping from a spoon. One could not rightly call them drops; drips would be more appropriate. They were, or seemed to be, as wet as they looked long.

There is nothing leaks as readily as a Pin Oak tree. They seem to funnel water directly to the place one is standing or sitting, regardless of the place.

The morning looked good for ducks to fly, but as is often the case, the ducks so far had failed to appreciate that fact. However, one must





always be alert for the unexpected. I did notice a small wave, or unaccounted for ripple, disturb the surface of the water. No ducks had come into my line of vision, nor had I heard any ducks hit the water. Yet anything is a possibility when it pertains to ducks. Slowly I turned my head for a look around. Not too far away another hunter was wading carefully. His gun, held in an alert position, looked like he was covering an advance scouting party. As he came closer and abreast of me I noticed a small boy tagging along behind him.

Being a guest in the area, I was acquainted with several hunters, but it was not until later in the day, I met these hunters as father and son.

I noticed the lad would stop at intervals, to pull up his boots. Why, I do not know unless it was so they would hold more water. On several occasions, he had stepped in places too deep for comfort. Yet he followed on, and out of my sight.

Since no ducks put in an appearance, I decided to return to a more comfortable place, the "Quacker Box," or lodge.

Several hunters had returned before me. It was not long until we saw the father and son combination coming up the path. Though soaked to the hide, the lad was eager and full of questions. After pouring him out of his boots, along with the water, and hanging his clothes to dry, I had a chance to become acquainted, and was very much impressed with the boy. He was polite, and showed respect and devotion towards his father. He was slight in build but wirey, one of the type who even now, at age 10, would outlast many grown-ups during a hike. He had the delicate features of a Grecian God, which he came by honestly.

I had the pleasure of meeting his mother at a later time.

I often wonder how many fathers are losing the respect and devotion of their sons, or daughters, by not taking them along? We realize there are many times it may be impossible. Yet those excuses "They are too young," "Will be in the way," "Can't keep up with the others," "Make too much noise," "No place for a youngster," and many other reasons, are nothing more than a selfish way to

avoid responsibility to those more deserving.

I wish these fathers could have seen that boy. What a thrill it was for him to be accepted into the inner circle, listening to tales and stories, sharing the camp fare, and doing his share of camp chores.

Years have proven that children must learn, are anxious to learn, and learn a great deal by the impressions you, or others, leave with them. Maybe years would not be bothered to teach right from wrong.

If parents do not make an effort to teach their children, they will go to others for companionship, and to find out the natural things they wish to know, whether right or wrong.

The problem facing our society today would be of minor importance if more parents made an effort to be pals with their children. They would gain their respect, love, and admiration.

Children all make mistakes, but after they learn better very few would do anything to hurt the ones they loved.



There would be many times a hunting or fishing trip would be cut short, your youngster could tire, get cold, or become hungry and want to go home or return to camp, yet these are the things that establish their confidence in you. Knowing they can depend on you to look out for their safety, interests and feelings.

As years pass, and they grow more mature, they will outdo you. Yet that feeling of respect, confidence, and companionship has been established. If you have made the proper impressions, they will not be forgotten, and will be handed on to their children.

Every period of life has temptations and dangers. But youth is the time when one is most likely to be ensnared.

Youth is the fixing period, the season of disposition and habit. It is during this period, more than any other, that character assumes its permanent shape, and the young are apt to take their course for the future.

Learned men not only instruct and educate those desirous to learn during their life time. Even after they are gone the monuments they leave behind continue to do the same.

It is untrue that the ostrich hides its head in the sand when confronted by danger. It kicks viciously when cornered or wounded.

\* \* \*

The flightless kiwi of New Zealand lays an egg that is one-fourth its own weight. It is by far the largest bird egg in proportion to the size of the adult. The egg takes a good eleven weeks to hatch and in turn the chicks need three years—sometimes more—to grow into an adult.

\* \* \*

While the cow is still the chief source of milk in the western countries, other animals are also used to produce milk. These are the camel, the yak, the water buffalo, the ewe, the goat and the reindeer.

\* \* \*

The eggs of snapping turtles are good food but must be fried as they will not boil hard.

\* \* \*

The largest living starfish is the sunflower starfish which reaches a diameter of two feet or more along the North Pacific coast.





# Haunted, Hunting Grounds

## The Lost Forest of Tionesta

By Don Neal

**E**ACH year thousands upon thousands of tourists, fishermen, and hunters travel the scenic highways of Warren and McKean counties enjoying the vast natural beauties of this much-wooded section of our state. To them it is an exciting experience. And yet few, and only a few, are aware that close by is one of the most outstanding natural attractions to be seen anywhere in the eastern part of the United States. This is the "lost" forest of the Tionesta Scenic Area.

Locally, it will be hard to find anyone that has visited the place. And locally, too, it will be hard to find someone who can direct the inquiring visitor specifically on how to reach what is known to them as the "big timber." This may seem confusing—a scenic area that few have seen—but the Tionesta Scenic Area

is one of the most unvisited places one is likely to find in such a fairly well settled community.

Why? Mostly because it is a frightening, foreboding land of towering hemlocks and giant beeches which have stood unmolested by man since the beginning of time, their foliage so thick and inter-grown it blankets out the sunshine. Only one faint trail penetrates the twisted tangle that is strewn across its dank floor, where Nature has piled fallen tree upon fallen tree and now propagates a growth of saplings that struggle to exist among the debris. Here, exposed in stark reality, is a vivid example of the survival of the fittest—a startling revelation of the failure of the aged. Not at all, I am sure, the pleasant sight we commonly associate with our ideas of what might have been the forest primeval.

And this is truly the "forest primeval." This "climax" growth of the Tionesta Scenic Area is, in every sense of the word, a virgin forest. It pre-dates by many years, even centuries, our other virgin forests which are leftovers from the great white pine forests that once covered our lands. In fact, prior to what experts think must have been an all-consuming Indian fire that burned over what is now the north-eastern part of the United States all of the land was covered with a growth of hemlock and beech exactly the same as can now be seen in the Tionesta Scenic Area. It was on the ashes of this great fire that the seeds of the "virgin" white pine flourished and eventually grew into the excellent forests they were.

Somehow, the section where the Tionesta Scenic Area is located escaped the flames of this gigantic inferno, and so, is the same today as the rest of our forests would have been if the fire had never burned. Because of this, they, as a part of the Allegheny National Forest, are being preserved with the utmost care so that scientists can study them. For



LONE MAN-MADE IMPROVEMENT in the Tionesta Scenic Area is this sign marking the 4,000 acres of totally undisturbed virgin forest.

it is the conviction of forest specialists that if the cycle of Nature had been allowed to continue without interference the white pine forests would have eventually returned to the "climax" state. Too, in this area where Man has not disturbed Nature's basic process, science can better study the effects of insects and disease on species that are native to the locale.

But however important the role of the scientist, the government has appreciated, too, the nature-lover's, the fisherman's, the hunter's attraction to the unspoiled wilderness. They have divided the forty-four hundred acres that comprise the Tionesta Scenic Area into the equal parts of twenty-two hundred acres each. One, they have set aside exclusively for the scientist, the other for the outdoorsman. In the one half, that of the scientist, there are no trails or roads allowed and general use of the area is discouraged. In the other, the half reserved for the use of the outdoorsman, there is a trail, already mentioned, and there will be others opened now that the Tionesta



Scenic Area is to benefit from the Allegheny National Forest's most recent recreational project, Operation Outdoors. Also, with funds from this project, a ten-table picnic unit is to be constructed. However, so far as it is known now, there will be no camping allowed in the immediate area.

To the true outdoorsman a trek through the forests of the Tionesta Scenic Area is a revelation. As I have pointed out, the first impression one gets of this forest can be a depressing one. It is so unlike the woodlands we are accustomed to walking through. And yet, one cannot cross its cluttered floor without feeling something of the primitive man rise within him. Nor can he fail to thrill to the massive trees around him. Hemlocks, known to have been saplings at the time Columbus discovered America, stretch their ponderous bodies up into the leafy canopy overhead; and beeches, just as venerable, stand at their side. Veterans of this timeless forest, weakened by age, lay where they have tumbled down to block the path of the visitor no matter which way he turns. Something of life, something of death, greets him at every turn of his head. Yes, to any outdoorsman it is a revelation of the ways, the processes, of Nature. Certainly it is a sight worth seeing.

Possibly the easiest way to get to the Tionesta Scenic Area from either Kane, or Warren, is to travel on U.S. Route 6 to Ludlow. From this point, a newly constructed all-weather forest road goes all the way into the area, a distance of six miles. Quite naturally, the section offers some unusual sport for the hunter, and there are some very good trout streams near by for the fisherman.

It could be that the foregoing description of the Tionesta Scenic Area is unreal, out of focus. Perhaps what I see as an example of the rawness of Nature another would see as

a sylvan wonderland. That is the difficulty of trying to describe a phenomenon such as the Tionesta Scenic Area; of trying to translate one's impressions of such a place so that they will be meaningful to another. Possibly, it can't, or shouldn't, be done. Maybe, if you are so inclined, you should discover the "lost" forest of the Tionesta for yourself. So, the next time you are struck by the wanderlust, why not pack your gear and head that way. Believe me, regardless of how this piece of rugged wilderness impresses you, you will not be sorry you made the trip.

AGE SUPPORTS BEAUTY as this tourist rests against the trunk of a 412 year old hemlock tree on a trail in the Tionesta Scenic Area.





# The Birthday Present

By Bob Bell

Illustrated by Nick Rosato

**R**USTY Manning stared into the small campfire, absently shredding a piece of bark from the log he was sitting on. A flurry of snow blew over him, but he didn't notice; his mind was too preoccupied. Tomorrow's the last day, he was thinking. The last chance I'll have for a year. I've got to connect tomorrow.

Across from him his father moved the blackened coffee pot closer to the fire, then tossed a few pieces of split birch into the flames and watched them flare up, highlighting his son's features under the mop of hair which gave him his nickname. The evening meal was finished and the camp chores were done. It was time for reminiscing and idle talk and plans for the next day's hunt, but they were both silent. The crackling of the fire seemed too loud and the man cocked his head, listening. "Getting Warmer. Probably melt tomorrow."

Rusty looked up. "What? Say, Dad, do you remember that big buck you and Bill saw around here? The one with the funny antlers?"

"Palmated?"

"Yes. I wonder if he's still around?"

John Manning filled his pipe and thumbed down the tobacco. "I guess he is. We'd have heard if anyone got him. He sure had a beautiful rack, finest I ever saw. What made you think of him?"

"Oh, some tracks I saw today. Big as a young steer's. Probably weren't his, but there's always a chance. Real big."

"Maybe the snow melted and made them look bigger," his father teased. He wanted to break up the solemn mood of the youngster. They had been out four days and hadn't fired a shot. To a sixteen-year-old on his first deer hunt, four days could seem a lifetime.



Rusty chuckled. "Maybe." He listened to the wind in the hemlocks and felt it on his cheek. One more day. One day to get a buck and Mom's present.

It had started years before, almost before Rusty could remember. His mother's birthday came in deer season and his father once jokingly said he'd bring her a set of antlers for a present since he wouldn't be home to celebrate it on the proper day. For some reason this caught her fancy, and when he produced the antlers that first year she was delighted. The following year she demanded another pair and it had grown into a family tradition. When the first son, Bill, was old enough to hunt, he twice managed to present antlers when his father failed. Never since the game started had they failed to get at least one set, to be cleaned and fastened on the den wall on a plaque with the date and hunter's name.

They had looked forward to the time when they could all hunt together and made bets about who would get the biggest deer. Then Bill went into the Army. In his last letter, written from overseas, he mentioned the other hunts and hoped they would be successful this year. "I guess Rusty will handle it this year," he wrote. In a post-script he added, "Don't forget to carry your good-luck piece. You might need it!"

Rusty reached inside his shirt to rub the object he wore on a buckskin thong around his neck. It was a silver dollar. Bill had happened to bring it home on furlough one summer and offered it to Rusty if he could hit it with his rifle. Rusty remembered the scene perfectly. They were behind the barn, shooting at a tomato can at one hundred measured yards. Rusty hit it three times with his feather-weight scope-sighted .257.

"You're pretty good, kid," Bill said after the last shot. "Maybe not as good as Dad, but pretty good!" Then he reached into his pocket and produced the silver dollar.

"Think you can hit this?" he grinned.

Rusty examined it curiously. He had never seen one before. "How far?"

"Oh, thirty-five feet."

Rusty studied the possibilities. The distance was short, but that in itself offered complications. His scope would be slightly out of focus and it wasn't zeroed in at that range. Nevertheless, he thought he could do it. But Bill's face was too innocent. There was a catch somewhere.

"How many shots?"

"Just one. One shot. Hit it and it's yours."

"What if I miss?"

"Then I get the first three shots at chucks today."

Rusty grinned. "Okay." He loaded his rifle.

"Ready?" Bill asked, and Rusty nodded.

"Here goes!" With a sudden underhand sweep, Bill tossed the dollar into the air. For a moment Rusty stood frozen. Then without conscious effort the little rifle jumped to his shoulder and he caught the flash of silver in the scope. It moved rapidly, but his concentration was so acute it seemed to be hanging there. The cross-hairs were etched against the sky, and Rusty made his allowances instinctively and shot. He didn't hear the report, but the dollar flew off at a tangent and he knew he had connected.

"Hot pups!" Bill yelled, and ran to retrieve it. "Not bad, kid," he glowed. "A little off-center, but not bad at all." He tossed the dollar to Rusty and ran his big hand through the shock of red hair, pulling it affectionately. "Keep it for a good-luck piece, fella. Maybe you'll have a million of 'em someday."

"Aw, who wants a million?" Rusty said. They laughed and went into eat.

It had been a perfect day and thinking about it made Rusty's throat

tighten. He stood up. "Guess I'll go to bed, Dad. You coming?"

"Soon. I'll have some more coffee first." John Manning stared at the fire, listening to the silence beyond the crackling flames, then glanced into the tent. He wondered how many men had a wonderful family like his. Not many, he guessed. The fire died down and he felt chilly. Rusty stirred in his sleeping bag and sat up.

"Dad?"

"What, Rusty?"

"Maybe Bill will be with us next year, huh?"

"Sure he will, son."

John Manning knocked out his pipe and made ready for bed.

Rusty's movements wakened his father and he looked at his watch. "What time is it, Rusty? I only have five-thirty."

"That's about right." Rusty was lacing his boots.

"Well, shoot, boy, why you getting up so early? It won't be light before seven."

"It's the last day. I don't want to waste any of it." He stepped out of the tent. "I'll get some water."

John Manning yawned and lay still. He hoped Rusty would get one. He'd be heartbroken if he didn't. He unzipped the bag and struggled into his clothes, feeling the sting of frosty air on his skin. Their luck couldn't last forever, though. The odds were too much against it. Maybe this was the year they wouldn't get a set of antlers.

They finished breakfast long before daylight and stacked the tin plates. Rusty made some sandwiches. "I might not be back at noon. Can't spare the time."

His father nursed a cup of coffee. "Which way you going? Anything special in mind?" He was thinking of the small fork-horn they had seen the first day. "Low behind the shoulder, Rusty," he had whispered, wanting him to make the kill.

"Squeeze it off." The buck made a beautiful picture, framed by clumps of silver birch against a background of dark hemlocks. "Take him!" he had insisted, as Rusty hesitated, then lowered the rifle. With a flick of his tail, the deer vanished.

"Why didn't you shoot?"

"It wasn't my deer."

"What!"

"It was your deer, not mine. You saw him first, you should have shot. I want one, but I've got to do it alone."

The sudden irritation Manning had felt disappeared under the flood of pride. "Okay, son," he said "Do it your way."

Rusty pocketed the sandwiches and picked up his rifle. "I'm going across the creek and up that other hollow where I saw those tracks. Maybe I'll see the big one. I'd sure like to get him."

John Manning tidied up the camp, kicked snow on the fire and left too.

The stars were fading when Rusty topped the ridge. He paused and checked the time. It was just seven. He loaded his rifle and stood for long minutes, eyes trying to pierce the shadows, ears straining for some sound. Suddenly the grayness was gone and it was day. Trees became decisive in outline and the gray blob he was watching became an unimportant snag. He studied everything in view, then moved slowly along the edge of the ridge, the snow squeaking slightly underfoot.

He had gone several hundred yards, eyes probing every patch of laurel, rifle ready, when the sudden thudding of hoofs made his heart jump, but it was only two does. A while later he passed some deer beds, but they were old.

The sun was above the trees when he crossed the flat on top, and the snow was melting, drops of falling water making black holes in the snow. Rusty sat on a log and unwrapped a sandwich. The morning was half



gone and he hadn't seen anything but two does. The sandwich made him thirsty and he packed a snowball and sucked it, wondering which way to hunt. Maybe he wouldn't even see a buck today. Well, he'd better get at it. Rusty stood up, heaved the snowball into a clump of pines and reached for his rifle.

The snowball fell and there was a startled snort and a flash of gray and a huge buck burst from the pines, rocks rattling as he surged up the slope, white flag waving, antlers bulking high! For a splintered second Rusty stood frozen, rifle forgotten, eyes filled with the wild beauty of the animal. Then he gave a little yelp of excitement and threw the rifle up, swinging it frantically, trying to find the deer in the scope. But he was gone. Feverishly he pointed the rifle, searching the woods, the hillside, but he had vanished like a snapped rubber band. Even the noise of his hoofs was gone.

For an instant Rusty doubted that he had seen him; then he ran over to the pines to look at the torn moss and earth where the hoofs had plowed and dropped to his knees to feel the leaves still warm from body heat.

For a long time Rusty knelt there, hands pressed on the deer's bed. He felt like crying. "It was him," he said aloud. "The big one with the funny antlers. I could have had them." He pounded his fist on his knee. "I missed the only chance I'll ever have at him."

He got up and breathed deeply, trying to control his pounding heart. His eye caught an object in the snow and he kicked it in disgust. It was the snowball he had thrown. It must have almost hit the deer in the face as he lay there, quiet as only an old buck can be, while he sat almost on top of him.

Rusty grinned wryly. He sure must have been surprised when that snowball plopped down. Then he sobered. But not nearly as surprised as I was.



He trudged down the hill, careless of any noise now. What would his Dad say when he told how he'd had a chance at the big one and didn't even raise his gun?

Rusty stopped at a stream in the hollow and buried his face in it. It was so cold it made his teeth ache and droplets clung to his lashes and ran off his nose. He blew them away and drank again, feeling the solid cold all the way to his stomach. Then he brushed the slush off his knees, moved into the sun, and pulled out another sandwich. After he'd eaten it and had another drink he felt better.

"Shucks," he said. "It's not even noon yet. I've got plenty of time to get a deer."

The going was easy in the hollow and the water covered any slight noise he made. The sun was bright, making it easy to see among the trees, and he spotted the deer before he had gone two hundred yards. It was standing in an opening seventy-five yards away, slightly uphill. Rusty could see the rack plainly. The deer seemed to be watching something down the hollow.







Almost casually Rusty raised his rifle. The crosshairs settled behind the shoulders, and his finger was steady on the trigger. For a long moment he held it, then slowly, ever so slowly, he lowered the rifle.

"No," he whispered defiantly. "If I can't get the big one I don't want any." While he watched the buck turned and moved over the ridge.

Farther down the hollow he crossed several sets of boot prints. They were the first he'd seen all day.

For several hours Rusty hunted the area where he'd seen the big buck. He followed the tracks until they mingled with others, then he crossed the flat and ghosted through the thickets on the side hill. Twice he saw deer moving ahead of him, not running or frightened, but just aware of his presence.

Finally he paused. "I'm a darn fool," he murmured. "It was bad enough not getting a shot at the big one, but at least I should've killed the other buck. The season's almost gone and I haven't fired a shot. I wanted to get one for Mom, too."

Despondently he glanced around. Then his eyes narrowed as they caught a glimpse of movement in the laurel sixty yards away. His heart suddenly slammed against his ribs. It's him, I know it's him! Desperately his eyes worked over the thicket, now black in the late afternoon. He wanted to raise the rifle and use the scope, but he was afraid to move. Somewhere just ahead of him, inside a patch of laurel fifty yards square, was the biggest buck anyone could hope for. He knew it. He felt absolutely helpless. All afternoon deer had drifted before him as he moved. He knew he couldn't get a clear shot that way, and in his helplessness he wanted to shout and run and kick and throw things. But he was afraid to move.

Then the thought hit him. Why not? He couldn't sneak up, the deer would just disappear, but maybe he could startle him again! Without

stopping to think, Rusty gave a shout that would have shamed a Cherokee and ran full speed toward the thicket.

For an eternity nothing happened. Then the big buck, his nerve broken, exploded from his hiding place. Rusty slid to a stop, feet slashing furrows in the snow, and flipped the .257 to his shoulder. Through the scope he could see the muscles rippling as the deer drove uphill. Then he pressed the trigger and it all ended in the middle of a bound. For an instant he felt a flash of sorrow, then he raced to the deer.

"I got him, I got him! Oh, golly, it's the big one and I got him." He wanted to dance and sing and shout, he wanted his dad to be there, and Bill! It was minutes later before he calmed down enough to run his fingers over the wide palmated antlers and count the twelve long points.

When he finished field-dressing the deer, he looped his sling around the antlers and tugged. He pulled and slid and sweated. The deer hardly budged. "Gee," he panted, "I'll have to get Dad to help." He figured the distance to camp. It was over a mile through the woods. Or he could cross to the road, go up that and over to camp. It was farther but easier. He decided to go through the woods. For a minute he stood over the deer, reluctant to leave it, then he ran toward camp.

His father heard the shouts as he approached. "Dad, hey, Dad, I got him! C'mon, help me drag him back!"

His father looked at the red, sweating face, split by a tremendous grin, and his heart lurched. Sonofagun, he did it, he thought. He got one on his own!

"Where is he? How big?"

"Come on. He was too big to drag. I had to leave him. The big one with the funny antlers. Come on!"

A half an hour after Rusty left the deer they were back, standing in the snow where the buck had fallen. But the buck was gone.

Rusty was numb. He stood straddle-legged, staring wide-eyed at the spot. "It . . . it was right here. I ran at the laurel and scared him and this is where . . ."

His father's quick eye took in everything. "Of course it is, Rusty." He picked up a torn piece of cardboard. "Here's your tag. Someone stole your deer." His first flash of anger was replaced by a cold rage. "Come on, they're heading for the road. We'll catch them before they get there."

Rusty saw them on the road, two men facing his father and the deer between them. For a moment he didn't notice the uniformed man standing to one side near the green pick-up truck. Then the man spoke.

"Mister, I'm afraid you'll have to have some proof this deer is yours. I came along just as these men dragged it out. I checked the tag and it matches this man's license."

"That's right," the tall man broke in. "I killed it about a mile back in there. Shot him right through the neck. You got a helluva lot of nerve to try and steal him right in front of a warden."

"Listen," Rusty's dad said, and his voice was colder than the wind before a December dawn. "My kid shot this buck. He was too big for him to drag so he ran back to camp for me. When we got back the deer was gone and his tag was there in the snow. We followed the drag marks straight to you."

"The deer's mine," the man snarled. "My tag's on him and that's proof."

John Manning's feet shifted slightly and the Savage seemed to move. "Listen," he said. "That's my kid's buck and I want it."

There was dead silence on the road. Then the warden spoke. "That'll be enough, mister." His voice was backed by authority and the tall man relaxed.

"Well, wise guy, I guess that settles

it. Unless you got some proof for the warden here." His voice was mocking.

"I can prove it's my deer," Rusty said, and the men started. In the tenseness of the moment his arrival had gone unnoticed.

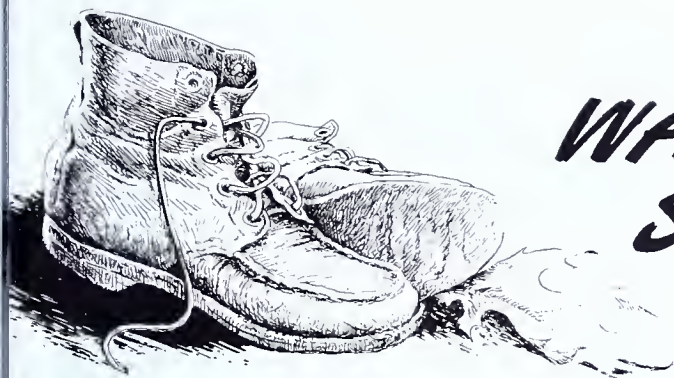
The warden looked at him carefully. "You have some kind of proof, youngster? It's a serious thing, to accuse a man of stealing a deer." His eyes ran over the others and his voice suddenly got hard. "But you prove it to me and these guys are in for a barrel of trouble."

"I can prove it," Rusty said again, and every eye was on him. "You see, when I had to leave the deer, I thought this might happen. I know few hunters would steal a deer, but there's always a chance. I wanted some way to prove he was mine if anyone took him." His voice was tired and he looked at the men almost with pity. "So I cut a little slit in the hide along the ribs, under the left front leg—" he motioned tiredly,—"and shoved my good-luck piece in. It's a silver dollar, nineteen twenty-three, with a bullet hole through it a little off-center."

The antlers looked fine in the den, the wide heavy points gleaming in the light from the fireplace. Rusty and his father watched while the small lady with the copper hair stood on tip-toe to trace the points and touch the silver dollar fastened to the plaque. "Rusty, they're beautiful," she said. "But why did you put your good-luck piece with them?"

John Manning exchanged a secret glance with his son, then chuckled softly. There were some things it was just as well a woman didn't know. "Well, it's this way, hon," he said. "Rusty probably figures he's used up all the luck in that dollar. Bill will probably bring him another one when he comes home, anyway." Then he leaned back in his chair and put his feet on a hassock and looked up at the antlers for a long, long time.





# WALKIN' SHOES

By NED SMITH



## Wild Tea Time

1. From what plant is "Indian lemonade" made?
2. Peppermint is a wild plant that has often been planted in gardens. True or false?
3. A delicious "tea" can be made from goldenrod. True or false?
4. In what respect are sassafras leaves unusual?
5. Sweet fern is a low-spreading fern of the bottomlands. True or false?
6. What is the best way to preserve the leaves of peppermint, pennyroyal, etc.?
7. What tree's roots are used for flavoring home-made apple butter?
8. "Tea" is best extracted from the leaves of mints by boiling. True or false?

**I**N Grandad's day the woods and fields were his medicine chest. The sassafras that grew along his line fence furnished a "tea" for "purifying the blood" each springtime. Boneset from the meadow was good for anything from a broken leg to spring fever. Celandine was thought to cure warts, while jewel weed's cool juices relieved the itch of poison ivy and nettles. Sweet fern was a first rate vermifuge for man or beast.

Grandad also knew a number of plants that made *tasty* drinks. Store tea and coffee were expensive, but peppermint, dittany, pennyroyal,

mountain tea, and chicory could be had for the taking.

In the light of modern medical knowledge home remedies have been largely forgotten, and the wild beverages that survive do so because of their pleasing flavor, regardless of whether they were originally regarded as treats or treatments.

The list of plants that have been so-used is staggering. Those described in this article represent but a small fraction of the total, and were selected because they all provide pleasant drinks with a minimum of preparation. As in all experiments of this nature, be sure of the plant's identity before using it.

You can not only enjoy your favorite wild "tea" while it is in season, but the eight plants discussed in the article can also be preserved for future consumption by drying. Merely strip off the leaves or root bark, whichever the case may be, and spread them on a tray or rack placed over a radiator or other source of gentle heat. The sun itself will do a good job on a hot, dry day. When all moisture has been driven from them, store in jars or plastic bags until needed.

To extract the best of the flavor with none of the bitterness never boil the leaves or roots. Bring the water



to a boil, remove it from the heat, and immediately add the plant parts. Cover for several minutes with a close fitting lid, then pour the liquid through a strainer into the cups. Be sure to try these decoctions iced as well as hot. The mints in particular make a deliciously refreshing summer drink when chilled and, of course, the sumac "lemonade" is always served cold.

With all their interesting flavor it is hardly likely that any of these plants will force tea or coffee off the market, but many of them are really good. Best of all, it's great summer sport to poke around the fields and forests searching for the makings.

**1. Sweet Fern**—Deer hunters are probably familiar with this fragrant, branchy shrub that grows around forest clearings, along woods roads, and in old burns. Its long, slender, lobed leaves are dark green and leathery in appearance. When crushed they exude an agreeable odor.

During the days of the American Revolution this plant was one of many used as a substitute for tea. Its leaves do make a pleasant drink, as you will learn if you steep a mess of them in boiling water.

**2. Sweet Goldenrod**—One of Nature's best "teas" is made from the leaves of the sweet goldenrod, commonly called "mountain tea" in Pennsylvania. It is a slender plant that grows in dry, sandy soil on our mountains and ridges. The leaves are narrow and lance-shaped, with smooth margins, and are peppered with minute translucent dots. When bruised they give off an attractive anise odor. The flowers are arranged in a one-sided head.

This plant and its anise-flavored extract are well known to many rural folks in Pennsylvania, particularly in the anthracite regions where it seems to be most abundant.

**3. Sumac**—This heading refers, not to the white-berried poison sumac, but to the staghorn and the smooth sumac—two species that bear clusters of red fruit. So-called "Indian lemonade" is made by crushing the fuzzy berries in hot water, steeping, straining through a cloth, and chilling. Add the right amount of sugar and you have a refreshing summer drink that looks and tastes like pink lemonade.

**4. Peppermint**—Brought to this country by European immigrants this well-



known mint has truly gone native, and can be found in profusion on many of our streamside meadows. The one- or two-foot purplish stem is surmounted in late summer by long terminal spikes of pink or lavender flowers. The thin, dark green leaves have a cool minty flavor and fragrance.

The tea extracted from the peppermint's leaves is one of the very best. Added to imported tea it results in a pleasant drink with all the lift of the "storeboughten" product.

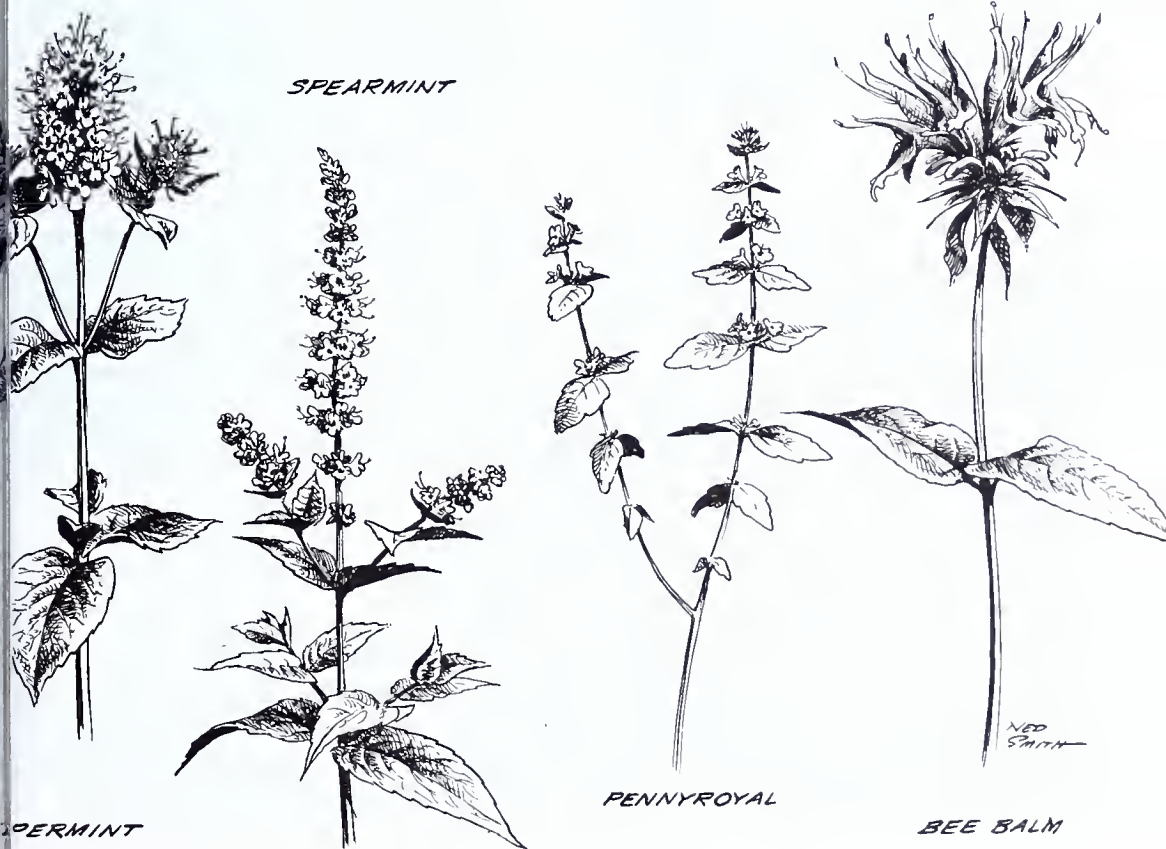
**5. Spearmint**—This is another introduced European plant that has escaped from cultivation. Lush stands are often encountered in wet places. The branching plants average a foot or so in height, the leaves much narrower than those of the peppermint. The pinkish or pale lavender flowers are arranged in separated clusters on long terminal spikes. Spearmint leaves

are used like those of the closely related peppermint.

**6. American Pennyroyal**—This slender-stemmed little plant is quite common in dry fields and pastures, and often occurs in thick stands in old woods roads. The stems are densely hairy, the leaves less so, and the odor of crushed leaves is distinctly aromatic.

This native herb was a great favorite of old-fashioned rural folks, who invariably had a bunch or two hanging behind the kitchen stove to dry. The flavor is not so cool as peppermint, but mighty good just the same.

**7. Bee Balm**—Another plant that has been used for tea-making is bee balm, sometimes called Oswego tea or scarlet wild bergamot. It is a tall, erect plant, crowned in summer with a ragged cluster of tube-like scarlet flowers. When making tea plenty of the dark green leaves should be used, as they



are not as full-flavored as most of the other mints.

8. Sassafras—'Most everyone knows the sassafras as the tree with three different leaves. In the days before tin cans farm kids grubbed the roots from fencerows to use as flavoring in home-made apple butter or for the annual spring tonic. We moderns might question the medicinal value of this latter decoction, but there's no law that says we can't drink an occasional cup for taste alone.

Sassafras roots are at their juicy best in early spring, and the darkest, reddest ones yield the most flavor. Small roots are chopped into short lengths, large ones are peeled and the woody interior discarded. Thoroughly dried and stored in jars sassafras root will keep for a long time. When you feel the need for a hot cup of tea simply steep a quantity of root fragments in a kettle of hot water until the desired reddish color is extracted. Sweeten with sugar to taste.

### ANSWERS TO THE QUESTIONS

1. Staghorn or smooth sumac.
2. False. It is an introduced European mint.
3. At least "some" of the goldenrods, sweet goldenrod for one, make a delicious tea.

SASSAFRAS



4. They are found in three different shapes, commonly on the same tree.
5. False. Sweet fern is not a fern at all, but a woody shrub. It grows in dry, sterile soil.
6. By drying.
7. Sassafras.
8. False. They should be steeped in water that has been boiled and removed from the heat.

### Known Deer Mortality In January

One kind of deer population barometer is available through comparative records of the common causes of deer losses. The miles of highways, number of farms, square miles of woodlands, and other conditions in Pennsylvania having changed but little, year to year, such comparisons do offer basis for judging the size of the herd at various seasons of the year.

Following is the reported deer loss in Pennsylvania for the month of January. (No reports of winter-killed deer.)

<i>Crop Damage</i>	<i>Vehicles</i>	<i>Illegally Killed</i>	<i>Miscellaneous</i>	<i>Total</i>
20	435	48	151	654

The comparable report for January 1958 shows the total deer loss for that month was 677.

### TIPSHEET AVAILABLE FOR SPORTSMEN

"Soil Conservation Tips for Sportsmen" is a new U.S. Soil Conservation Service publication which should be read by sportsmen, the Wildlife Management Institute reports. The illustrated tipsheet shows practices that will benefit fish and game. Request it from the SCS, USDA Building, Washington 25, D.C.





# Farming—Wildlife's Ally or Enemy?

By Norma and Bill Gorst

**T**HERE'S one fragment of our population that would point an accusing wing or paw at farming and call it a little two-faced. Farming can be a friend to wildlife around the farm. It can also be as destructive as a wolf in a chicken coop. Why? A look into farming history in this area may supply a clue.

In the early days, it was the pioneer farmer who opened up the forests of Pennsylvania to plant crops. It was farming that created a habitat suitable for the increase of certain animals almost unknown to the early settlers. In other words, it was farming that gave us what we now call our farm game, but it's farming that can also destroy it.

What's behind this strange para-

dox? Why is farming an ally and also an enemy of wildlife?

When Pennsylvania was covered by dense stands of timber, what we now speak of as "farm game" lived in the brush and grass of forest openings. With his ax, the pioneer farmer hacked more clearings in the forest cover. More forest edges resulted and, rather than fleeing from the work of "the ax and man," some animals were attracted to it.

The woodcock and quail were unknown to the first settlers but they soon made themselves at home a short distance from the pioneer farmer's doorstep. They were joined by increasing numbers of cottontails, red fox, skunk, fox squirrels, and a variety of song birds. The woodchuck

moved from rocky forest openings in the Northeast to hayfields as far south as Maryland, while the opossum spread north to become a member of Pennsylvania farm communities. In the remaining cut over woodlots, deer began to thrive. They could now nibble on tree sprouts, growing where dense stands of tall trees once put their food supply well out of reach.

The ring-necked pheasant discovered that here, too, was the kind of land he was looking for. It's unlikely that this Chinese bird could have existed anywhere in the country before grain was planted. Hungarian partridge also needed the American farm in order to make a home.

But the steel bitted American ax, finest of its kind, kept chopping. It chopped on light soils, steep slopes, stream banks, and other sites which needed a protective covering of trees and smaller plants. "Clean farming" was the farmer's answer to the trees challenging him as he struggled to cut farms out of the Pennsylvania wilderness. The only good tree was a saw log. The farmer's children inherited his grudge against the forest, and gave it a final kick in the pants. It has never recovered.

Farm game animals, by that time, had spread over thousands of acres of newly created habitat. Their numbers reached a peak only to find their homes disappearing almost as quickly as they had been created. Clean farming was not only destroying farm game's food and shelter, it was destroying the foundation of both; the soil.

Farmers plowed and planted every square inch of ground they could clear. The crop rows, running up and down hills, became miniature rivers when it rained. As time passed, they became gullies that often grew large enough to swallow a farmer's horse. Less noticeable, but more destructive, was the erosion that carried soil away in sheets, making itself

known only through decreased yields and thinner soils.

The steep slopes, once covered with protective forests, were overgrazed and soon fed fewer and fewer cattle. Erosion resulted because there was nothing to hold the soil in place. A similar thing happened along stream banks where the sod was overgrazed and pounded into the ground by heavy hooves. The stream slowly ate into the naked earth of its banks and carried it downstream.

As the soil disappeared, so did the wildlife. The animals didn't follow the soil down the river, they just couldn't live and reproduce in the eroded fields and overgrazed pastures.

Farming had become a villain instead of a hero to many of our furred and feathered friends. But, fortunately, that is not the end of the story. Where farming was first the friend, then the enemy of wildlife, now modern farming methods are showing the way for making it a permanent ally. Healthy soils, good crops, and abundant wildlife all go hand-in-hand. What are these modern farming methods that can keep our soils healthy so that they will support both crops and wildlife?

These modern methods are called "conservation farming." They are giving the land a new look. Instead of plowing and planting crops straight up and down the hills, the rows go around them, each row becoming a tiny dam. Large, square fields are giving way to long ribbon-like strips of crops about twice the width of a main road. An uninformed farmer might think his neighbor is building a super highway.

These two practices, contour plowing and strip cropping, combined, slow down water as it runs off the land. If the strips of crops are alternated with close growing cover crops such as clover and grasses, the water is slowed down even more. Who benefits by these methods? Both the



farmer and wildlife. The farmer's soil is kept at home and the strips provide shorter distances between food and cover for wildlife. The close growing cover crop offers hidden resting places and some food, while close by, the cultivated crops furnish the main dining area. Most important of all, the plants and wildlife are healthy because the soil and water are kept at home.

Even the best soil can't always hold all the rain drops that fall on it. When tiny spaces between the bits of soil have soaked up all the rain they can hold, the remaining drops must run off the surface of the land. Natural drainage ditches or depressions normally carry this water across the cropland. To protect them from the cutting power of water, they are planted to a thick cover crop. The result is a natural waterway running down the hill, providing a jungle of protective grass for small game as it moves from one contour strip to another.

If this doesn't do the job, the farmer can even build an eaves trough around the hill to catch the surface water before it picks up enough speed to carry soil away. These shallow troughs are built on a very slight grade and generally dump the waste water into a well protected woods or meadow. The diversion terraces, as the experts call them, are seeded to a permanent type grass-clover mixture for protection against the flowing water and, indirectly, another travel lane for farm game has been made. Steep or rough open fields unsuited to cultivated crops can be limed and fertilized to improve them for pasture. Often these fields are seeded with locally recommended grass-clover mixtures which build better cattle . . . and better farm game.

Even woodlots can be managed in a way that will prevent erosion, and be helpful to both farmers and wildlife. Instead of clear-cutting a stand of trees, only the ones that are big

**CONTOUR PLOWING** coupled with strip cropping benefits both farm and wildlife crops. The farmer's soil is protected from erosion and the strips provide shorter distances between food and cover for wildlife.





MULTIFLORA ROSE HEDGE makes a good-looking, inexpensive and long-lasting fence to separate crop and pasture lands. At the same time, it provides ideal nesting cover for many kinds of farm wildlife and songbirds.

enough to make good lumber are removed. The remaining trees then have room to grow into valuable saw logs. Removal of some trees may also allow sunlight to reach the forest floor and encourage the growth of blackberry, dogwood, fox grape, and other wildlife foods, to say nothing of the tree seedlings. In this way the soil's protective covering is also maintained.

Stream bank plantings are a way of decreasing erosion along streams that run through pasture land. Red ozier dogwood, silky dogwood, and basket willow are excellent for this. They keep the bank in place and at the same time provide food and shelter for farm game.

Farm pond construction hasn't been mentioned, but it too has become a conservation practice. The farm pond provides a basin that will hold excess runoff waters and supplies water for many needs about the farm. In addition, it attracts wild fowl and is a "water-hole" for farm game, not to mention the fishing possibilities.

You see, farming can be a permanent friend of farm game when con-

servation practices are applied. Conservation farming is already dotting the Pennsylvania landscape. But how is it getting there? Converting an enemy of wildlife into an ally doesn't happen over night and certainly not without a little help. When and how did modern farming begin taking over in Pennsylvania? How can it continue to increase its coverage of the Commonwealth? Most important of all, where can a farmer get information and help when he decides his farm is slowly "going down the drain"; his income and farm game with it?

Conservation farming came to Pennsylvania largely through the efforts of a number of state and federal agencies. In the early 1930's, the Pennsylvania Game Commission was one of the first to recommend and help farmers lay-out strip-cropping. About the same time, the Soil Erosion Service, now the Soil Conservation Service, began demonstrating its techniques for managing raindrops. Meanwhile, methods of increasing soil fertility and crop yields were being taught by the Agricultural Extension Service.



Although these technical services were available, there was still a gap between the trained technician and the farmer, who felt "grandpappy's way of farming is still OK for me." Today, Soil Conservation Districts are filling this gap. Each District board, made up of four farmers and one county commissioner, is serving as a middleman between the farmer and the technician.

Soil Conservation Districts are a hub for modern farming activities. When a farmer decides he needs help in modernizing his farming, he may call on his local District for advice. He can obtain a complete conservation plan which will be the result of his own decisions. Good forest management, permanent pasture, cropland, stream banks and farm game can all be a part of the plan. Instead of doing the job haphazardly, the plan covers every acre. Thus, there is no overlapping of practices and the farmer can work at his conservation job in a logical, orderly fashion. The time it takes to do the job will depend on his effort and financial resources, but whether it is two years or twenty, he will have a complete plan of his own choice.

Farm game is very fortunate in Pennsylvania because Soil Conservation Districts are now operating in

50 of its 67 counties. They cover approximately 83% of the state's farmland. The addition of twenty districts in the last three years indicates that more and more agricultural leaders are recognizing their value.

In addition to the regularly recommended conservation measures, there are many special practices designed just for the benefit of our wild farm friends. Many farmers find that a little special effort to increase farm game can be very rewarding. But the basic conservation practices, designed to keep the soil at home, are the foundation for a healthy land. They will benefit the farmer through better crops plus more and healthier wildlife.

Soil is the foundation of living things on the land. Its treatment will determine whether it will produce good or bad, healthy or sick crops . . . and that means wildlife too.

The homes from which farm game animals were so rudely evicted after placing faith in their landlord, the farmer, are being restored. Pennsylvania farm land is taking on a new look today, just as it did in the pioneer days, only now there is promise that it will remain healthy and productive, both for the farmer and his tenants, farm game.





### Point of No Return

**BUCKS COUNTY**—It was recently reported that a local man came by a fledgling blue jay last year and took it home for raising. The little jay did well and grew up to be quite a sassy and mischievous household pet.

It is reported that friend jay's favorite prank consisted of taunting the family cat, until one day pussy came up the tree with "blood in his eye." The bird did not fly away. No no! He lured the cat farther and farther out on a skinny limb. Finally, in sheer desperation the cat leaped for its quarry, and the bird quickly hopped to a higher branch. Kitty desperately tried for a new toe hold, only to discover that he had leaped beyond the point of return. Down he tumbled, much to the delight of his jeering adversary.—District Game Protector W. J. Lockett, Doylestown.

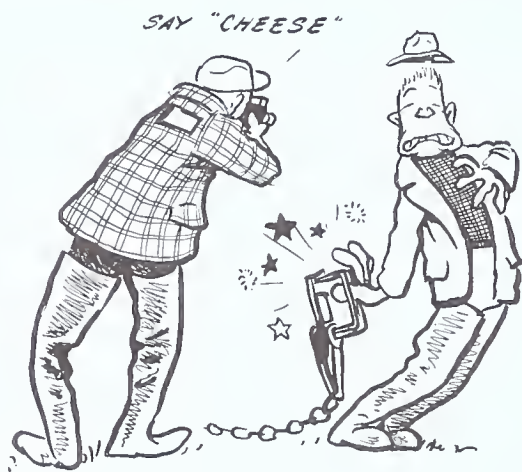
### Action—Camera

**WAYNE COUNTY**—Mr. Forkey and Mr. Wyman of Honesdale participated in trapping beaver this season and it was their habit to carry an 8mm camera to record the un-

usual while on the trapline. Mr. Forkey was setting a #4 trap when it suddenly sprung, catching the handler about the largest joint of his thumb. Mr. Wyman arose to the occasion and proceeded to record this on film for posterity, much to Mr. Forkey's annoyance. Insult was added to "injury" when Mr. Wyman inquired of the now fuming Mr. Forkey as to the correct camera setting. Then he released his friend from the trap and when last seen, Mr. Forkey's thumb resembled the business end of a Louisville slugger.—District Game Protector Frederick Weigelt, Honesdale.

### Green Pastures

**CHESTER COUNTY**—The number of spring fires in this area this year is alarming. As an example, one fire company (Oxford of Union Fire Company) made 13 trips to fight field and grass fires in a one day period. Along with the grass and other organic matter burned up, not to mention the game or game cover, there were a number of buildings that were burned down as a result of careless burning of rubbish and field fires. I personally observed several mallard ducks with eggs burned up and several nests of young rabbits. In checking with several landowners, I asked why they insisted on burning the fields off each spring, and the best answer they could give me was that the grass grew greener after a field was burned. (Which proves they certainly have a good imagination, since it was obvious that new grass will certainly appear to look greener which the black background left as a result of burning dead grass.)—District Game Protector P. J. Filkosky, Parkesburg.





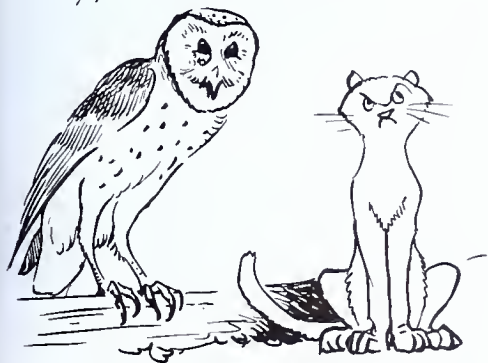
## Educational Interest

**LANCASTER COUNTY**—One of the High Schools in my district has three Hunting and Fishing Clubs and one Conservation Club. All of the clubs are very active and carry on quite a program. In April we started to give these boys a course in Safe Gun Handling. There will be approximately 150 boys in these four clubs. All of these clubs are in the Solanco High School at Quarryville. This school's students are primarily farm children. This shows what can be done in our schools if the teachers and the authorities are interested in sports.—District Game Protector J. P. Eicholtz, Strasburg.

## Build A Better Mousetrap

**GREENE COUNTY**—Mr. Ralph Bell, Jefferson, Pa. (who bands birds for U.S. Fish & Wildlife Service) told me of the following study of Barn Owls. He said that in 1957 he erected a 52 gallon drum for nesting of a Barn Owl. That year it hatched its young in the drum. The next year, 1958, he took the drum down and it was half full of rat and mice bones. There was not a sign of a rabbit or any piece of game in the drum. This just goes to show that not all of our owls are predators to game.—District Game Protector, Richard L. Graham, Carmichaels.

PRETTY GOOD, EH ?!!



APPARENTLY YOU WEREN'T  
SO SMART, EITHER !



## Long, Long Trail

**SOMERSET COUNTY**—On March 31st I received reports of several Gray Fox being killed in an unusual manner. One was from a Somerset R. D. lad about 12 years of age who said that while out walking, his dog treed a fox in a small sapling; he crept up on this fox and dispatched it with a club. Later that evening I received a call from a man in the same area saying that when returning home from work his dog was barking at a fox in the back yard. He went in the house for a gun and then shot this fox.

A previous report from a Bakersville man who was out walking back of town when he came upon a fox hound and a short distance away a Gray Fox which he killed with a .22 rifle. Both dog and fox appeared to be exhausted. When he checked on the dog it was found to belong to a man across Laurel Hill mountain in Westmoreland County a distance of about 15 miles. This man had been hunting a week before when his dog started a fox and disappeared.—District Game Protector Edward Cox, Somerset.

### S'no Rabbits

**COLUMBIA COUNTY**—Even though there was an apparent scarcity of rabbits during last hunting season, the rabbit trapping season in this district was very productive. I had a total of 1250 rabbits trapped and released for breeding in this area.—District Game Protector Harold Harter, Bloomsburg.

### Bulb Snatcher

**BLAIR COUNTY**—On the 19th of March I received a call from a Mrs. Koenig of Altoona. She told me that there was something living under a pile of lumber in the neighbor's yard and it was coming over in her flower bed and digging all of her flower bulbs up and eating them. I went to see her and took a box trap along and sure enough, something was eating her bulbs and had made droppings around that I had never seen before. I talked to her and the description was that of a muskrat, but her neighbor said that it was a much bigger animal and described something entirely different. From his description I thought it might be a nutria. So I set the box trap and for a week I did not catch a thing. Only when I set a steel trap did I catch the culprit—a large muskrat. It was a good two blocks from the nearest water with a nest under a lumber pile which it had built with grass that it had pulled from the lawn.—District Game Protector Russell Meyer, Altoona.

U.M.M. - TULIP /



### Friendship

**LACKAWANNA COUNTY**—Gene Coleman, Staff Reporter on the *Scranton Times* and quite a crow hunter told me of an unusual incident several days ago. He was driving along Lake Sheridan when he saw a movement in the woods. He stopped the car and walked across the road to investigate. Just a little way off the road he saw a small deer and a very small mongrel dog standing together. His first thought naturally was that the dog had been chasing the deer and had brought it to bay. However, neither animal showed any evidence of a chase. As he stood there watching them the dog did not molest the deer. He then approached a little closer and the dog ran around the deer and ran under the deer's legs. As the dog did this the deer butted the dog with his head, it appeared playfully. As he approached nearer both the dog and the deer left. It appeared in this particular instance that these two animals were quite friendly. How they became acquainted with each other would certainly be interesting to know.—District Game Protector Stephen Kish, Avoca.

### Waterfowl Field Day

**MONTGOMERY COUNTY**—On March 11, while on patrol in Point Township along the North Branch of the Susquehanna River I had the pleasure of finding a corn stubble field that was being used by a nice flock of waterfowl. The flock was made up of between 350 and 400 Pintails, 6 pair of Baldpates, 5 pair of Mallards, 1 pair of Redheads, 3 pair of Black Mallards and 3 Canada Geese.

These birds used this same field for about a week and were observed by many people from cars traveling along Route #11.—District Game Protector George Dieffenderfer, Danville.



## Leave Sleeping Bears Lie

**CENTRE COUNTY**—The old cliché—"Leave sleeping dogs lie"—doesn't seem to carry any meaning here in Centre County, at least for some.

A mother bear was discovered sleeping in a rhododendron patch in Harris Township by a fox hunter on January 19. Since that time scores of people have visited the area and some have thrown sticks, etc., at her in order to have a snapshot with her head held up. One report was that a party had even lifted a front leg in order to see the cubs. (There are reports of three cubs) I have been unable to verify this last report but the leaves and the ground around the bear show evidence that people have been within 8 feet of her.

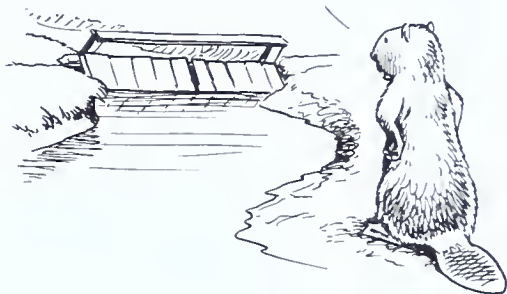
It is hard to imagine anyone so cruel as to wish to chase a mother from her young, when to do so would mean certain death for the babies, or someone so foolish as to take a chance on losing a limb or their life just for a picture of a bear. —District Game Protector Charles Laird, Pleasant Gap.

## Making Pigs of Themselves

**BUCKS COUNTY**—On March 31st, GP W. J. Lockett and myself investigated a reported deer damage complaint in West Rockhill Township, Bucks County.

The newly seeded lawn of the landowner was badly torn up. Mr. Lockett and myself were convinced that a deer wouldn't go to such lengths to tear up a lawn, even though the presence of cloven hoof prints in the area indicated to the landowner that it was a deer. After a casual investigation we were convinced that the tracks were that of animals other than deer. The presence of pig bristles on a nearby maple tree showed that pigs were the culprits this time, not deer. —District Game Protector A. L. Graver, Quakertown.

NOW, THAT'S WHAT I CALL  
A REAL DAM



## Bridge Busters

**SOUTHEAST DIVISION**—Beavers have a good reputation for building dams, but on a recent investigation of the reason for the collapse of a bridge over a small creek on State Game Lands #160 in Schuylkill County, evidence was found that they can also do other things. While no beaver was actually sighted the large tooth marks which he left while chewing thru one of the stringer timbers was a good calling card. Some time in the near past he had evidently chewed almost entirely thru one of the main white pine timbers which held up the bridge. On first thought no reason could be given for his actions but on further investigation, it was found that originally the timbers had been used in a railroad bridge and it was then thought that perhaps some salt had soaked into the wood and the beaver was after the salt. —Land Manager Ralph Shank, Pine Grove.

## Snagged And Tagged

**NORTHUMBERLAND COUNTY**—Mr. Luther Blue of Elysburg R. D. reports this unusual incident. While hunting with his son Earl and Mr. Lester Wagner during the 1958 antlerless deer season, he was standing watching a field when he noticed a deer come out of the woods below him and lay down. It then got up and started to run. Mr. Blue noticed something odd about the deer and

thought it was wounded. He shot the deer, which was a doe. When he got down to the deer he noticed a limb protruding from the shoulder of the deer. Closer examination revealed a chestnut snag approximately 1" in diameter and 45" long which had entered the deer in the brisket, took an upward course and came out between the shoulders. Mr. Blue said there was not a drop of blood in the deer except for congealed blood at the wound in the brisket. This happened between 8 and 8:30 a. m. The only thing we can figure is that the deer in flight impaled itself on the snag which must have been protruding from the ground at a 45 degree angle, then broke the snag off, ran a short distance to the place where Mr. Blue was standing.—District Game Protector Clude Laubach, Elysburg.

### Monkey Squirrel

NORTHEAST DIVISION—During the early part of March after a light snow, I approached a Commission corn crib to check the contents. Approximately twelve gray squirrels left the crib through a hole in the wire screening. One of the squirrels ran up a small sugar maple tree to the very top. After eyeing me for a few minutes, he began pulling in the fine branches with his front feet, much the same as a monkey would when reaching for bananas, and began to eat off the buds. He continued this for perhaps fifteen minutes before going on to other parts of the woods. It seemed rather strange to see this incident happen with so much corn available just 50 feet away. But then I suppose we look strange to the squirrels when we pick chestnuts, beechnuts, walnuts, etc. and even break off the ends of birch and sassafras to satisfy our hunger.—Land Manager William Fulmer, Bloomsburg.

### Can Lick His Weight In Wildcat

CLINTON COUNTY—During March Charles Cross of Kettle Creek had quite an experience with a bobcat. Charlie still likes to trap cats and usually likes to take them alive, despite the fact that he has only one arm. In a recent check of his traps a large bobcat was found at bay and was immediately jumped by the trapper's dog. Charlie drove off the dog and half leading and half dragging began to work the cat to his truck. The dog jumped on the cat again and this time the cat pulled out of the trap and climbed the first thing handy. This happened to be Charlie. Bitten on the calf of the leg and on the shoulder, Charlie, in trying to dislodge the cat, slipped on the ice and went down with the cat on top. At this stage of the fracas the dog jumped in again. This dog weighs about 40 pounds and it must have been something to see with man, dog and cat all balled up. Charlie finally got control of the situation, both dog and cat, and finally got the cat home and into the cage. —District Game Protector Charles Keiper, Renovo.







## Meet Meandering Mr. Mephitis

By Wilbert Nathan Savage

**W**ATCHING a skunk soft-footing it along a fencerow with all the leisurely abandon of a tired old-timer traveling under the spell of spring fever, one does not find it easy to accept the fact that Mr. *Mephitis Nigra* (common eastern skunk) is a true relative of that nervous bundle of furred lightning—the slender weasel. But of the weasel clan he is, with the sleek little short-eared head and beady eyes helping to establish proof of kinship.

At times the skunk may be a roguish knave. For occasionally he latches onto a prize pullet, and the eggs of ground-nesting birds—with turtle and snake eggs rating just as tasty!—are a popular dessert in Skunkdom. On the other hand the animal is a walking insect exterminator. In one survey of the skunk's eating habits, 41% of all examined stomachs contained either grasshoppers, cutworms, weevils, June bugs, white grubs, crickets, or a combination of part or

all six of the "delicacies." The skunk is a great vegetarian and fruit eater, too. Nearly one-fourth of the stomachs contained wild strawberries, grapes and wild cherries. Thirty-one skunks were strict vegetarians and had eaten neither meat nor fruit.

The skunk's best known stamp of positive identity is, of course, his ability to spray a potent fluid that has no rival counterpart in the evil-smelling natural substances of the world. Known among the more astute naturalists as *butyl mercapton*, the powerful scent will sometimes burn the skin on contact and may cause temporary blindness if even a minute trace of the mist reaches the eyes. And anyone who has ever inhaled a little of the atomized fluid can attest to its power to bring on distressing nausea that will long be remembered. Once the foul amber liquid touches a garment it is best to use fire instead of water to get rid of the odor. And always keep this in mind when you're trifling with a

skunk: you aren't safe from the creature's firing mechanism at distances of six or eight feet! For he may, with wind favoring, deposit some of his mist on objects up to fourteen to sixteen feet away.

The skunk's "ammunition" is a pair of small sacs located just under the skin on either side of the anal vent, to which each peasized reservoir is connected by short ducts. These tiny bulb-glands are operated by special "jet-spray" muscles. If Mr. Mephitis fires too often in succession he may empty his scent sacs to a point where nearly a week is needed for complete restoration of the supply. But his atomizing equipment is extremely efficient: he uses only one small drop at each ejection. However appropriate his scientific name—*Mephitis*—a Latin word meaning "bad odor"—and the classifying grammarians of old weren't kidding!

Skunks dislike heavily forested areas. Actually, there are many reasons to believe they enjoy reason

GROUND NESTS of many game and songbirds are a favorite target of skunks. The most common items in their diets, however, are insects. They also feed heavily on mice, fruit and berries.





ably close association with civilization. The little mammal frequently beats a routine path to convenient edge-of-town garbage dumps, and it is not uncommon to find a family of skunks "dened up" beneath old farm buildings. They like to range in open pastures, woodlots, etc. In the spring, farmers may be surprised to know, mice may make up as much as three-fourths of the skunks diet.

As a boy, roaming the borderline hills of Maryland-Pennsylvania, I often came upon evidence of one of the skunk's favorite pastimes; gobbling up a nest of bumblebees or yellowjackets and all their meager store of honey. The skunk is a pretty good digger and he can make short work of a nest of any kind of bees. The stings, if any, bother him not at all, indicating that his mouth must be far from sensitive!

Skunks sometimes become a nuisance around apiaries. By luck or design they succeed in getting inside a hive and do enough damage to provoke the beekeeper into waging some form of retaliation—usually in the form of a steel trap or gunpowder and lead. But in fairness to the skunk clan it must be pointed out that the offender in the business places of domestic bees (if bees can ever be called *domestic*!) is usually an individual animal—frequently an old renegade male.

Skunks do not "fatten up" and hibernate in the same long-slumbering manner as the woodchuck and the bear. But a bad spell of weather, especially severe cold, may keep them "holed up" for weeks at a time. During such intervals they frequently become quite gaunt and their nails, unused, grow rapidly and become long and clumsy. During all cold weather months the female is less active than the male.

Toward the last part of February or the early part of March increased activity about the dens signifies arrival of the mating season. The

abundance of muddy tracks in thawing snow at burrow entrances may lead one to believe the region is virtually alive with skunks, while in reality the tracks may belong to no more than two mate-seeking males. Old males usually avoid each other if possible, but a young male often takes a severe cuffing from an old he-skunk who finds the youngster overly attentive to a Mrs. Mephitis that he himself wishes to woo. No matter how bloody a battle may become between two rival skunks, they very rarely ever use their "chemical warfare" device on each other.

The female skunk follows a one-litter-a-year pattern pretty closely. The arrival date: late April or May, but there are instances on record where births occurred in July. The litter may contain as few as two, as many as twelve. S. Howard Williams, in "Mammals of Pennsylvania" says skunk mothers bear as many as eighteen young! But certainly this sort of blessed event must be heralded as a newsworthy rarity by Skunkdom's official statisticians. When the young are a couple of weeks old they can give a good account of themselves as little stinkers. Removal of the scent sacs before they become lethal is a simple operation in the hands of a veterinarian and skunks do make fine, friendly pets—kitten-like and real show-offs in a clean and harmless kind of way. And grown-ups do not become ill-tempered as frequently as do raccoons, woodchucks, etc.

The family group remains together until mating time the following year, at which time they split up and the propagation process begins anew. A mother skunk, followed by her young marching in the customary single-file formation, presents a pleasing kind of unforgettable wildlife behavior. There is a fairly popular—but hardly believable—legend that expresses belief in the mother skunk's ability to point out to her brood the tracks of



Photo by Maslowski &amp; Goodposter.

YOUNG SKUNKS are born naked, blind and helpless. The litters number between 4 and 10. Skunk fur, altho not in great demand at present, has a durability 70 percent that of otter and often is sold under trade names of Alaska sable and black marten.

their worst four-footed enemies—the wildcat, weasel, and fox. The great horned owl and the harpy eagle are the skunk's worst winged enemies. Neither seem to be affected by the skunk's liquid bombardments. A friend of mine once shot a great horned owl that reeked with skunk odor, indicating a battle lost somewhere for Mr. Mephitis, for the owl rarely fails to emerge the victor in a skunk-owl encounter. Some naturalists insist that the great horned owl looks upon the skunk as its *favorite* food!

Shunk fur still retains an important place in the fur market. Beneath the somewhat coarse outer hairs is a soft underfur that is glossy and fine. Skunk fur often masquerades under the name of Alaska sable or Hudson sable. But it can bear its proper name in the market without danger of suffering brand disgrace, for processing firms in the fur business have a special patented treat-

ment that effectively removes all traces of natural odors.

The matured size of skunks varies considerably. It always seemed to me, in trapping the animals, that the "broad stripers" were consistently larger. But there is no proof that this may be counted on as a reliable rule throughout Skunkdom. Average length of the common eastern skunk is about 29 inches, including the tail, which is about 11 inches long. Mr. Skunk will weight from four to seven pounds. Both the fore and the hind feet are equipped with four curved claws each. The soles of the feet are naked but they possess a leathery kind of toughness.

There are some thirty-odd species of spotted and striped skunks in the United States—including the hog-nosed skunks along the Mexico-Texas border, the hooded skunk of southern Arizona, etc. South America has the badger skunk, fitted with unusually powerful digging claws and



one single stripe running down the center of the back. None of these skunks can ever correctly be called "polecats," a common misnomer in North America, for that name belongs to a related animal of Europe and Asia which wears a coat of dark brown above and black below. The chemical warfare apparatus produces the same sickening odor, for Nature seems to have achieved the utmost uniformity in the product control of *butyl mercaptan*!

For decades uncounted, particularly in the southwest, skunks have often been branded as habitually inherent carriers of rabies. Thus skunks in general took on the misleading name of "hydrophobia" skunks. Admittedly, the skunk has been an active participant in various rabies outbreaks, but he is no more susceptible to the malady than the fox or other wild creatures. Certainly, under normal circumstances, the bite of the skunk is no more to be feared than the bite of a squirrel or a housecat.

From time to time skunks do show a strange tendency to suffer a mysterious decrease in numbers, but this certainly has nothing to do with the presence of "hydrophobia." In 1942, for example, there was a marked drop in the skunk population in Pennsylvania "due to an unidentified epizootic." In the southeastern part of the State the animal's population still is somewhat below the 1925-1940 average. Elsewhere Mr. Mephitis, without revealing the deep secret of his peculiar variation in numbers from time to time, has made a favorable come-back. Generally speaking, the country over, the skunk population has increased rather than diminished with the encroachment of civilization because, as Ralph De Sola puts it in *American Wildlife Illustrated*: "The larger mammals which preyed upon the skunk have become depleted, while its food supply has become more plentiful.

Albino skunks do occur but they are far from being plentiful. I have never seen one in the wild, but Mr. Rayburn Whipkey, a Fayette county friend, saw one while 'coon hunting last year in the Spruce Hollow district some six miles northeast of Connelville. According to Whipkey the animal's coat was a dazzling white and looked "all fluffed up." When the skunk turned to face the auto lights he exhibited a small black spot between his eyes. He appeared to be "just fooling around at the roadside, unafraid, unhurried, and unapologetic as to the hour, which was about 2:30 a.m."

Very often a dog, especially a 'coon or fox hound, will take advantage of an opportunity to challenge a skunk. The result invariably is that, no matter what the fate of the skunk, the dog is transformed into a highly unpopular monster until the odor "wears off."

I recall that at home as a boy we had a Shepherd dog which became involved with a skunk while on a routine "cow-fetching" assignment. For some very disturbing reason Shep's affection for every member of the family sky-rocketed to an all-time peak immediately upon his arrival back at the farmhouse. When he was glared at with icy abhorrence he feigned wide-eyed surprise, then became piqued by the whole thing and remained sullen—and in solitary!—for nearly a week.

Perhaps one of the best and fair-minded compliments ever paid a skunk came from a doctor I once knew. In his office window, arranged in lifelike manner, he had an expertly stuffed red fox, a wildcat, a mink, and a skunk. To those interested enough in wildlife to make conversation of the furry display, the doctor would always explain that the skunk, to his way of thinking, was by far the most respectable and humane member of the four-footed quartette.



# CONSERVATION NEWS



## PENNSYLVANIA BEAVER HARVEST SETS RECORD; TRAPPERS TAKE GREATEST NUMBER SINCE 1934

During this year's five-week beaver season—February 14-March 21—4,235 of the animals were trapped in Pennsylvania. In the one-month season in 1958 the total catch was 2,420, or about 500 less than the number taken in the same length period in '57.

During the state-wide 1959 season forty-two of the 67 counties yielded beavers. Crawford, with 490, maintained its recent-year reputation as the county in which the highest number of the animals are taken. Bradford County was second, with 355. Wayne took third place with 345. Tioga accounted for 277, Susquehanna 268, and Sullivan 262. Potter, Luzerne, Erie, Wyoming, McKean, and Elk Counties, in that order, showed totals in the 150 to 200 bracket, the highest first.

Notably, the County of Beaver in the populous southwest scored with 32.

The harvest this year was the highest since 1934, when 6,456 were taken in Pennsylvania's first beaver trapping season. The first season followed a waiting period to allow the streams and marshes to become naturally repopulated by beavers the Game Commission stocked between 1918 and 1924. (The animals were nearly extinct in the Commonwealth in the early 1900's.) Managing the beaver carefully, the Commission set the trapping season as: 40 days in 1934; close season in 1935; and two-week seasons 1936 through 1952. But trapper interest waned with the decreased value of the fur, and the beaver population swelled to the point the wild-

Photo Courtesy Johnny Nicklas, PFC.

BEAVER TRAPPERS in many parts of the state faced snow and cold weather during the 1959 season, yet were still able to harvest the largest number of "broad-tails" since 1934.





life agency lengthened the trapping period and increased the number of the animals a person might legally take. In 1953-54-55-56 trapping was permitted for three weeks, and a person could take 4 beavers. Four were allowed in 1957 too, but the trapping period was longer—February 14-March 11. In 1958 the season was extended to a full month, the permissible catch remaining at 4. However ice, snow and difficult travel conditions combined to hold the catch below expectation last year.

Because of the steady build-up in the beaver population, the increase in property damages by the "hydraulic engineers of the wild," along with continued low fur prices, the Game Commission encouraged additional trapping this year by extending the season. The 5-weeks 1959 season was continued to spring to make sure there would be desirable trapping conditions. Also the regulations for 1959 permitted a trapper to take 5 beavers.

The Commission gives the assurance the healthy cropping of the large furbearers this year has not seriously reduced the population. In fact, beaver complaints have been received since the season ended. The harvest will serve a good purpose by reducing the amount of damage the animals will cause in months to come. Also, many unemployed persons and others, induced to trap for the animals because of the liberalized regulations, are "in pocket" because the opportunity to take 5 of the animals made it worth while to trap for beavers.



GAME PROTECTOR Al Kriefski, right, inspects a 38 pound beaver caught in Paupack Lake, Pike County, during Pennsylvania's 1959 beaver season.

Carbon .....	14
Centre .....	35
Clarion .....	19
Clearfield .....	143
Clinton .....	77
Columbia .....	11
Crawford .....	490
Dauphin .....	2
Elk .....	151
Erie .....	195
Fayette .....	16
Forest .....	74
Fulton .....	4
Indiana .....	2
Jefferson .....	40
Lackawanna .....	122
Luzerne .....	188
Lycoming .....	101
McKean .....	153
Mercer .....	42
Monroe .....	77
Northumberland .....	7
Pike .....	135
Potter .....	192
Schuylkill .....	16
Somerset .....	2
Sullivan .....	262
Susquehanna .....	268
Tioga .....	277
Union .....	3
Venango .....	25
Warren .....	136
Washington .....	1
Wayne .....	345
Wyoming .....	157
<hr/>	
	4,235

#### BEAVER SEASON—FEBRUARY 15 TO MARCH 21, 1959

County	No. of Beavers
Beaver .....	32
Bedford .....	12
Bradford .....	355
Bucks .....	2
Butler .....	4
Cambria .....	10
Cameron .....	48



OUTDOOR RECREATION'S FUTURE was discussed by this panel at the 37th Annual Convention, Izaak Walton League of America, held in Philadelphia from April 21-25. Inspecting the poster and other literature on "Hunt America Time," the League's national program to foster better relationships between sportsmen and landowners, were, left to right: M. J. Golden, Executive Director, Pa. Game Commission; Frank C. Daniel, Secretary, National Rifle Association; Ed Cooney, Membership Director, I.W.L.A., Roger Latham, Outdoor Editor, "Pittsburgh Press"; and J. Greg Smith, Editor, "Outdoor America."

## Seth Gordon Presented Walton's Highest Award

Seth Gordon, one of the nation's foremost wildlife administrators, was presented the Izaak Walton League's highest conservation award, the Founder's Award, during the League's annual convention banquet at the Bellevue-Stratford Hotel on April 24.

Gordon, a featured speaker at the League's convention, was cited for his "dedicated service to natural resource conservation in an unparalleled career covering 45 years of public service." The award was presented by George F. Jackson, League president.

Gordon's career began in 1913 as a game protector in Pennsylvania. In 1919 he was appointed administrative head of the state's game department. He resigned this position in 1926 to become conservation director of the Izaak Walton League. In 1931, Gordon was elected president of the American Game Association. While

with the Association he participated in the drafting of the "Federal Range Plan," the "American Game Policy," the "Model Fish and Game Administrative Law," and other basic studies of the then-new profession of wildlife management.

Gordon was founder and chief administrator of the American Wildlife Institute (now subdivided into the North American Wildlife Foundation and the Wildlife Management Institute.) In 1936, he resigned from the Institute staff to once more head the Pennsylvania Game Commission, a position he held until his retirement in 1948, completing a combined 20 years of service.

In 1951, Gordon was asked by the State of California to serve as consultant in managing its wildlife and ultimately was appointed the first director of the state's Fish and Game Department, a position he held until his retirement this year.



## 200 Apply For Examination To Qualify As Student Officers

An even 200 men who aspire to become members of the Game Commission's Tenth Student Officer Class were given a competitive, written examination in Harrisburg April 4. Those interested in acquiring the instruction and experience that will qualify them for the position of Game Protector came from all over the Keystone State. The examinations were machine graded. The men whose marks registered highest and who, it has been established by home area inquiry, are desirable field officer material were asked to return to the Capitol City on May '21. They will appear individually before an oral interview board following which those accepted will be given a strict physical examination.

The men who attain the highest composite grade and possess the character and physical requirements will be invited to appear, June 15, at the Ross Leffler School of Conservation located in Jefferson County. There, and in the field at seasonal periods, the trainees will receive classroom and practical field experience in wildlife management for a period of approximately 9 months. Student officers who

measure up to the prescribed standards and complete the course will be commissioned Pennsylvania Game Protectors.

## 13 Trophy Bears Harvested Last Season

Thirteen of the 439 legal-age black bears reported bagged in Pennsylvania's 6-day season in late November last year were in the 350 to 450 pound class. Information on the kill cards submitted to the Game Commission at Harrisburg showed that 12 of the bears had been weighed. The weight of the thirteenth animal, one of the 400 pounders, was given as an estimate.

All of the bears listed below were males, and all were killed by rifle fire. The largest was bagged in Clinton County on the last day of season, a Saturday. Four others fell to hunters' bullets on the final day. Only 2 of the 13 were taken on the first day, Monday.

One of the 13 bears was killed in Cameron County, 2 in Lackawanna, 3 in Clinton, 1 in McKean, 1 in Mifflin, 4 in Monroe, and 1 in Tioga. The reported weights were: 455 pounds - 450 - 425 - 415 - 411 - 400 - 400 - 396 - 390 - 375 - 360 - 355 - 355.

REGISTRATION DESK handled processing of 200 candidates for the Game Commission's 10th Student Officer Class. These applicants took written exams at John Harris High School, Harrisburg, on April 4th.





## OUTDOOR FUN WITH A FUTURE



# Small Boat Safety

By Ted S. Pettit

**M**ORE and more outdoorsmen each year are adding boats of one sort or another to their list of equipment and are taking to the state's waterways by the thousands. No participant sport in recent years has mushroomed in popularity as has small boating, and with good reason. With a relatively inexpensive boating rig—cartop boat or trailer outfit, and an outboard motor—the outdoor minded family can find many new worlds to explore. Fishing, hunting, camping and nature photography or observation are just a few outdoor hobbies enjoyment of which can be increased tremendously by the use of a small boat with or without a motor.

In spite of this great increase in the number of boats using our waterways each year, boating remains a safe sport. Statistics show the number of accidents involving boats has remained about the same, even though the potential for accidents has risen tremendously. But statistics are peculiar things. They do not mean much to us until we become one of them. Then it's slight consolation indeed to know that the odds are hundreds to one against our becoming involved in an accident.

Each year the Outboard Boating Club of America, with headquarters in Chicago, makes a study of boating accidents in an effort to determine

the cause and also how similar accidents may be prevented. Interestingly enough, it has been found, that like firearms accidents, a large majority of boating accidents never should have happened. They could have been prevented with a little more common sense. These studies of boating accidents have resulted in a few safety rules, that apply to the use of all boats from canoes to the outboard cruisers. Following these rules to the letter—both in spirit and actual practice—will do much to prevent any boating hobbyist from becoming a "statistic" on the roll of accidents.

The first safety rule to observe carefully is "Don't overload the boat." Every boat has a safe maximum load and it isn't necessarily determined by the number of seats or the seating capacity. Most boat manufacturers indicate this safe load in numbers of pounds, and generally this is a good index to use. But if a boat is rated for 600 pounds, it does not mean necessarily that it is safe to carry one adult weighing 150 pounds and five youngsters weighing 90 pounds each. It takes a little common sense along with the load rating to determine the safe load for any boat.

The next safety rule is this: "Keep low in the boat." In one study made of accidents, it was discovered that more casualties occurred from people



falling out of boats than from any other one cause. Fishermen and hunters were high on the list of violators of this basic rule. When changing seats or moving about in a boat keep your weight as low as possible. Usually, this means that you rarely, if ever, stand upright for any cause whatever in a small boat.

Another cause of fatalities involving small boats is leaving the boat and trying to swim to shore. Distances over water are deceiving and it is all too easy to underestimate the distance to shore or to overestimate your swimming ability. Simply, a very important safety rule is: "Stick with the boat, even though it is swamped or upside down."

Most boats, regardless of the material of which they are made, will float even though they have a motor

attached and are full of water. Metal and fiberglass boats have special flotation chambers. Wood boats will float from their own bouyancy. Flotation chambers can be installed in boats that do not have them.

It is interesting to know that most boats will support more people in the water than they can carry. But the people involved must lie flat in the water and float while holding the boat for support.

So if you find yourself in the water with your boat swamped, stick with it until help arrives or until the wind blows you to shore, or until you can paddle to shallow water.

When using a motor be sure that it is the right size for the boat and load. Too much power can be a safety hazard. Most boats have an Outboard Boating Club (OBC) plate on the

**PROPERLY LOADED BOAT** insures safety afloat. Every boat has a safe maximum load and it isn't necessarily determined by the number of seats. Even weight distribution and balance are essential.



transom that gives the recommended maximum horse power for a motor for that boat. Observing this recommendation is a very important safety rule as well as good insurance for keeping the boat in seaworthy condition.

But with or without a motor, another safety rule is to balance the load from stem to stern and from port to starboard. Every boat is made to ride a certain way in the water. Unbalanced loads may lead to swamping or capsizing, but even if they don't, they do make the boat more difficult to operate whether by oars or motor. A boat that "squats" has the bow high and any gust of wind tends to swing it about. A boat that "plows" has the stern high and the same thing may happen along with the possibility of swamping.

The correct equipment in good repair in many cases is required by law. But even if not, it is just good

common sense to have it in the boat, know how to use it, and keep it ready for instant use.

Basic equipment starts with a Coast Guard approved life jacket or boat cushion for each occupant of the boat. Equally important is that each occupant knows how to use the life preserver should the need arise. Next, most old timers have a fire extinguisher handy, especially if the motor is used. Approved lights are a "must" in most places on boats using power and at least a good working flashlight is just plain common sense even if not required.

Good rope and an anchor that holds on the bottom are also classed as safety equipment. It occasionally happens that you must ride out a storm and tie up in strange places for an hour or more. At least half inch rope (nylon may be smaller) is necessary to safely hold a fourteen

SAFETY KIT should be carried in every boat. Basic equipment starts with a Coast Guard approved life jacket or boat cushion for every occupant of the boat but you should also carry extra shear pins, spark plug, rope and anchor, oars or paddle.







**KEEP LOW** in the boat at all times. One study of boating accidents showed that more people were injured from falling out of boats than from any other single cause. Rarely, if ever, should you stand upright while in a boat.

foot boat in a strong wind—and the rope must be in good condition.

When using a motor, it's good sense to take along extra shear pins, cotter pins, spark plugs, tools (screw driver, pliers, wrench), motor manual, and plenty of gas for the day. It's smart too, to know how to replace the shear pin and put in new plugs before you go out on the water. It may take hours to row the distance you can run with a motor in half an hour and although motors today are thoroughly reliable, some rental jobs or old ones may get temperamental. It's also wise to take along oars or paddles in case of emergency and for use in shallow water where landing or launching the boat.

Another important safety rule is to watch the weather. Summer storms can blow up in a hurry and many large lakes can get as choppy as the ocean. Head for shore and ride it out in a protected cove should a storm come up. If you are caught out in a blow, slow down and head into the waves at a slight angle.

Most experienced boatmen have another rule too. They get a map of new waters and study it carefully for reefs, rocks and shallow places. Then

until they get to know the lake, they travel slowly and line up dangerous places with shore landmarks so they know their location day or night. They avoid accidents and they also avoid damaging their boats, and this brings up another item to carry along and know how to use—a repair kit for patching holes. Many times broken bottles or sharp rocks can punch a hole in a boat regardless of how carefully we watch for them, and recent developments in fiberglass and other plastics make it reasonably easy to make emergency repairs on the spot.

The last safety rule concerns the operation of a power boat, and can be summarized briefly with the statement: "Hot rodding is kid stuff." This means driving carefully and avoiding sharp turns at high speed. It means keeping at a safe distance from other boats, swimmers, skin divers, water skiers and other water hobbyists. Many boats today are built to operate most effectively with high horse power motors and at high speed. When you get a planing hull up to speed so it planes, you are operating it according to its design. You are probably quite safe if you can



LIFE PRESERVER is not only legally required on motor powered boats but it should be worn, especially by youngsters or any non-swimmer.

handle the boat. But sharp turns and "buzzing" others on the water is not safe and usually proves the inexperience and lack of intelligence of the operator. The experienced boatman knows his "rig," its limitations and its capabilities. He practices using it safely so that safety afloat becomes instinctive with him.

For a complete booklet on outboard boating fun and safety, write to: The Evinrude Foundation, Milwaukee 16, Wisconsin, and ask for a free copy of "Outboard Boating Skills."

The following boating code has been developed as a guide for safety and courtesy afloat and is good for all boatmen to follow, in spirit as well as "to the letter."

As a boatman, I will do my best to **MAINTAIN MY BOAT AND ITS EQUIPMENT IN A SEAMANLIKE MANNER:**

I will at all times keep my boat clean inside and out; the bilges free of water and dirt, the waterline and bottom free of marine growths, the topsides free of marks and damage,

the cockpit and decks free of loose gear.

I will dry and coil all lines properly before stowing and see that all equipment is neatly stowed in its proper place when not in actual use.

I will take pride in keeping my boat shipshape. **PRACTICE SAFETY AFLOAT:**

I will not overload or overpower my boat.

I will carry a Coast Guard approved life preserver for each person on board.

I will carry a Coast Guard approved fire extinguisher and know how to use and maintain it.

I will be alert to weather changes and head for shelter when storms threaten.

I will avoid the wakes of larger craft, if possible, or cross them at a safe angle.

I will not allow anyone to stand in my boat, or to change seats until I have reduced to very low speed, or stopped.

I will not drive my boat at high speeds through crowded anchorages or swimming areas.

I will carefully observe the Rules of the Road both in letter and spirit.

**BE CONSIDERATE AND COURTEOUS:**

I will not throw garbage, rubbish or other waste where it will become a nuisance to others or cause pollution.

I will operate my boat in accordance with my responsibilities as a helmsman and with consideration for the comfort and safety of others.

I will render assistance promptly to those in trouble or distress and in all respects be faithful to the customs and traditions of the sea.





# "The Woodchuck Rifle"

By Jim Varner

IN last month's article "Pennsylvania's Elusive Woodchuck," some characteristics of this interesting mar- not were discussed, with not only the idea of reviving the interest of the more experienced riflemen, but principally to help the reader who is contemplating his first trip afield this summer after the chuck. To him the whole procedure will be an entirely new adventure where he must develop skill as a stalker, gain knowledge on the important rules of hunting safety and above all become a good judge of estimating unknown distances. Such experience can help our nimrod later if he hunts the more crafty big game.

Assuming our sportsman is well versed on safety, and quite well

understands the basic rules of careful approach and camouflage necessary when hunting elusive timid game, we will boil our discussion down to the subject of estimating unknown distances and the rifles and calibers best adapted to long range work on small targets. In other words, crow and woodchuck accuracy in a firearm is what the rifleman is interested in if he hunts this pair for sport. He is an embryo perfectionist and with experience will develop the technique of the expert, providing he purchases the correct equipment to start with and has been trained by experienced N.R.A. instructors, or other old-timers who know the game. There is nothing more discouraging to a new hunter than to purchase misfit rifles in unsuitable calibers with inadequate scopes and poor mounts. With the fine equipment available today at reasonable prices, these discouraging mistakes can be easily avoided. You don't have to hock your wife's jewelry to



purchase a satisfactory varmint rifle. So members of our big GAME NEWS camp, don't go out and spend all of your 'laughing-cabbage' for the first 'one-and-only' woodchuck outfit some over enthusiastic salesman tries to sell you. Check the consensus of opinion of your local N.R.A. shooters and try to attend some of their 'sessions' on the range as they test rifles and scope for long range accuracy. You will soon form your own opinion as to what is best suited for your pocket-book and requirements.

We will leave the rim fires and older slow center-fire cartridges out of the picture. The rim-fires are not powerful enough. The older center-fire cartridges are not fast enough in velocity and lack accuracy. Perhaps you will say, "Just what should we consider then as desirable woodchuck and crow rifle?" That question covers a lot of territory. Here we will promptly go into a great big huddle and try and solve it. First we will look over the list of the better known American rifles from the modest

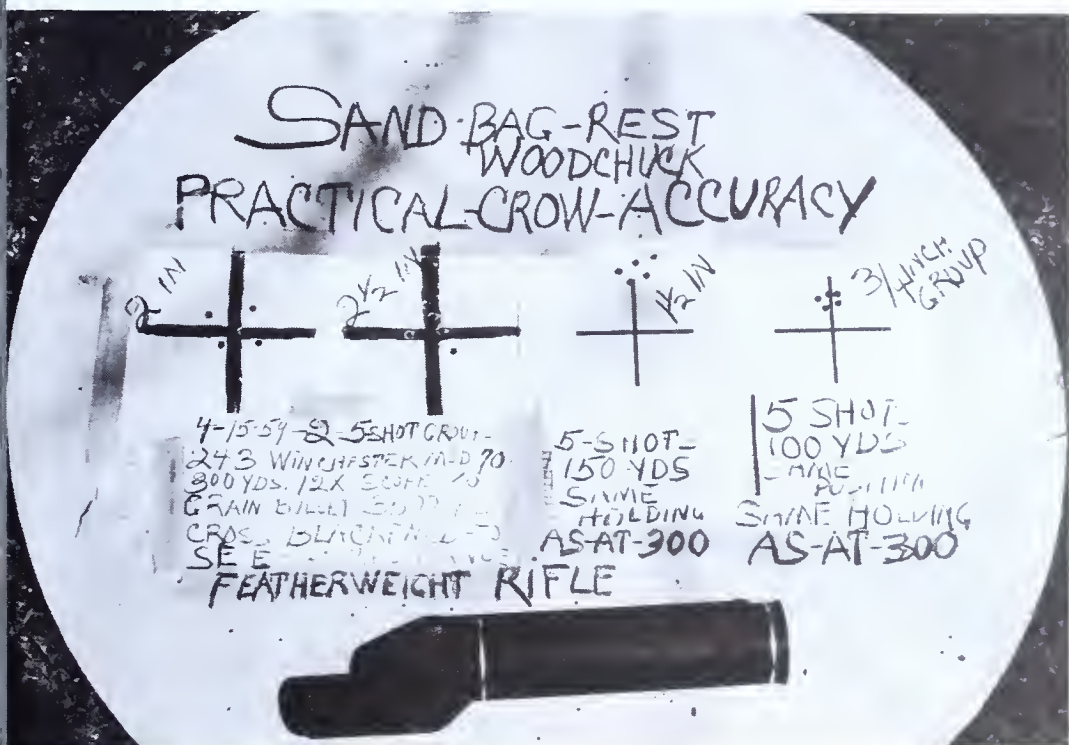
priced ones to the higher priced models. For the hunter who watches his pennies, here are some good buys. If you shop around you may find one of Winchester's discontinued model 43 light bolt action arms in 22 Hornet or 218 Bee caliber being closed out around \$45. These fine little rifles are drilled and tapped for popular scope mounts and with the excellent Weaver J4 scope which is being sold as low as \$22.50 they will do satisfactory work on crows to 125 yards and chucks to 175 yards on the less windy days. The J4 is about the least expensive practical scope you will find in four power. It is sturdy and has accurate adjustments for elevation and windage.

Next on the list I consider the Savage model 340 in 22 Hornet and 222 Remington caliber a lot of fire-arm for the money, which is \$60.00 plus or minus a few dollars. The receiver of this little arm is drilled for the cheap side mounts as well as the more expensive type. In the 222 Remington caliber you need more

SAND-BAG REST is used in testing accuracy of crow and woodchuck rifles at ranges from 100 to 300 yards. Mike Rinaldi, an experienced NRA instructor, is shown here firing a Model 54 Winchester 30/06 Sniper's Rifle or "bull-gun." The telescopic sight is a Lyman 15X Super Target Spot. With carefully loaded ammunition, this rifle consistently shot one minute of angle groups to all ranges.







PRACTICAL ACCURACY is shown in these groups fired with a standard Model 70 Winchester Feather-weight rifle in 243 caliber, using the 80 grain bullet at 3500 feet per second. These are average groups with this excellent cartridge and rifle.

magnification than the 4X to bring out the inherent accuracy of this splendid little cartridge which easily qualifies for up to 200 yard work on crows and at least 250 yards on woodchucks under favorable wind conditions. Continuing our suggestions for an economy set-up, let me say if you find your Weaver J2.5 or J4, or similar type scopes lack magnification for the longer shots, try one of the special Varmint Attachments as advertised by the Williams Gun Sight Company, Davison, Michigan. This attachment brings your J2.5 or J4 up to full 8X and costs only \$12. The R. A. Litschert Company of Winchester, Indiana specializes in these Varmint Attachments also. While their prices run slightly higher they are well worth what they cost.

Litschert's attachments are made to bring the J2.5, J4, J3 and the K6 up to 8X, 10X and 12X. Simply unscrew the front or objective lens on your low powered scope and screw in the

attachment according to instructions that accompany it. This makes any scope mentioned above a versatile all purpose one without changing the zero in any way. Use the hi-power attachment thru the summer on crows, woodchucks and targets then change back to the original lens for deer hunting providing your arm is of suitable caliber. Under rigid careful sand-bag rest testing, and many days in the field we have found above combinations highly satisfactory. While they don't possess the extreme brilliancy of scopes costing two and three times as much, they do serve a definitely satisfactory purpose.

In the next bracket one might consider the new 336 Marlin lever action in 219 Zipper. Winchester put this cartridge out a few years back on their 1894 action. Due to a flat nosed bullet being necessary in the tubular magazine, combined with its having a rim, it never became very popular. The older lever actions don't adapt

themselves to hand loading nearly as well as the bolt guns. Like the 22 Hi-power Savage this cartridge can be made a good one but why consider it when easier to handle calibers are made.

The Remington model 721 and 722 selling below \$100 offers the hunter about anything he may reasonably wish in the medium price field. Its barrels are precision rifled for utmost accuracy, the bolt is one of the safest and strongest, the trigger pull is crisp with no back-lash and the calibers it is furnished in should suit the most fastidious gun-crank. They range as follows: 222, 222 Magnum, 244, 257, 270 Win., 280, 300 Savage, 308 Win., 30/06 and 300 H. & H. Mag. Take your pick; you certainly can't go wrong. Every one of the calibers mentioned are modern super-dupers. All of them reload easily and this rifle's action is very smooth. The Remington 721's and 722's are tapped and drilled for all popular receiver sights and telescopic mounts. All of above calibers deserve the best telescopic equipment one can afford. However, above reasonable priced scope combinations will perform satisfactorily on this rifle.

Above the \$100 bracket one can choose from a variety that takes in the new trombone action Remington model 760 in all calibers mentioned for the bolt gun except the 300 H. & H. Magnum; the good old model 99 Savage lever action in 250/-3000, 243 Winchester, 300 Savage, 308 Winchester and 358 Winchester; the new Winchester model 88 lever action in 243, 308 and 358 calibers; the Savage bolt action model 110, made in both right and left handed bolt action, and in 243, 270, 308 and 30/06 calibers; the new Marlin and Colt bolt action rifles, using Sako or F.N. actions in above popular calibers and last but not least the famous model 70 Winchester bolt gun in models from feather-weight to long range vermin rifles and heavy bull-gun

target rifles. This is the rifle that made the 270 Winchester caliber so popular and right now is giving us two of the finest woodchuck calibers commercially made, the 220 Swift and the 243 Winchester which is a 6mm. I still consider the 220 Swift easily the peer of all the 22's or 224 caliber vermin cartridges when one considers practical accuracy and realizes he can purchase such accuracy and range over the counter. Despite arguments to the contrary, this cartridge reloads easily and adapts itself to all shooting from squirrels with reduced loads to 300 yard crow shooting and 400 yard woodchuck shooting. I personally prefer the 55 grain Sierra and Hornaday spire point bullets for extreme range. The Hornaday is a little bomb-shell when it hits. The factory load in this caliber is the fastest made today. It moseys along some 4150 feet per second from the muzzle. This model 70 is also made in 300 H. & H., 375 H. & H. and the tremendous 458 African Magnum. The last three would not qualify very well as woodchuck rifles but fellows who expect to use them on big and dangerous game certainly can learn a lot about them by practicing on woodchucks, thereby testing scopes or iron sights. Over 90% of our shooting today is on simulated targets. One cannot overdo testing equipment under field conditions. Old mother earth stops a slug striking 5,000 foot pounds as quickly as one striking 200 pounds. This about covers the excellent group of sporting rifles made by our American manufacturers in center fire cartridges. The custom made arms are varied as you will see later.

One of the more popular custom rifles made today is the Weatherby rifle made in standard calibers and magnum versions that are considerably more powerful than the regular arms companies produce. Other so called off standard, or 'wildcat' calibers, are made in numerous dimensions. These are fitted to our military





FIVE SHOT GROUPS fired at 100 and 200 yards with Varner's 219 Zipper Improved, using 55 grain Sierra 224 diameter bullets driven about 3500 feet per second. Rifle has a heavy Buehmiller barrel with a 10X Fecker target scope. Four of the five shots on the small target measure about one inch from center to center. The one shot low and to the right was pulled out.

Springfield and Enfield actions as well as European Mauser, Sako and F.N. Mauser actions. Many of them are good but they require an expert to get the best out of them; besides the cost of shooting is much higher. Wildcat calibers and bench rest firearms belong in another category which we hope to cover at a later date after the Wilkes-Barre Rifle Club holds their Registered Bench Rest Tournament.

High velocity is one thing and gilt edge accuracy is another. One can drive a 150 grain bullet around 3100 feet per second out of a 24 inch barrel in 30/06. Such speed with a perfectly formed bullet should produce a trajectory flat enough for woodchucks up to 350 yards when sighted to hit three inches high at 100 yards. However, if this maximum load is not highly accurate it is more or less useless as a woodchuck cartridge and practically worthless on crows. By the same token Roy Weatherby's great 30 caliber magnum is supposed to

drive a 150 grain -06. bullet at the tremendous velocity of 3650 feet per second. He claims one shot kills with this rifle on the heaviest African game. No doubt he is telling the truth but the same load may not have the accuracy necessary for crow and woodchucks. If it has, it would easily qualify for the title of the 'mythical' 500 yard woodchuck rifle. We hope to be able to give you more on this later on as three of these rifles are available. The recoil and noise of such an arm just about checks it off the list as a vermin rifle.

Briefly summed up the best calibers for vermin should be light in recoil, capable of at least one minute of angle groups to at least 300 yards. A minute of angle means one inch at 100 yards, two inches at 200 yards and so on. Bullets should have a velocity of 3000 feet per second or better with good sectional density which determines its ability to overcome resistance of the air and shoot flat. A cartridge which has a path

above the line of sight of over three inches at 100 yards when sighted in for 200 yards is not up to par for woodchucks beyond 200 yards and certainly is not a good crow rifle for that range regardless of how accurate it may be. Our smallest practical woodchuck caliber is the 22 Hornet. It drives a 45 grain stubby, rather poor sectional density, bullet some 2700 feet per second. When sighted in for 100 yards it rises one inch above the line of sight at 50 yards but drops 9 inches low at 200 yards. The same cartridge rises  $4\frac{1}{2}$  inches above the line of sight at 100 yards when sighted to strike center at 200 yards. In the hands of a careful outdoorsman who is a good judge of distances and wind velocities and who becomes well acquainted with it, a lot of crows and chucks can be eliminated with a minimum of fuss. The 222 Remington drives a 50 grain slightly better bullet 3200 feet per second. Its midrange height at 100 yards when sighted for 200 is only 2 inches. Its companion 222 Remington Magnum drives a 55 grain well shaped bullet some 3300 feet per second and has a midrange curve of roughly  $1\frac{3}{4}$  inches while the speed demon 220 Swift driving a 48 grain

bullet will not miss your hand out to 350 yards. It does even better with the 55 grain Sierra driven 3900 feet per second by hand loading. All of above loads are deadly varmint cartridges with practically no recoil. The 243 Winchester and 244 Remington just about hit the happy medium while the 270 Winchester 30/06, and 257 Roberts will all shot flat enough for 400 yard work if you prefer the heavier caliber. Excellent practical accuracy from standard weight arm is what the vermin shooter seeks. Recent tests accompanying this article will show you what we mean by dependable practical accuracy. Its not the freak now-and-then long range shot that counts. One wants an outfit which is so dependable and fool-proof he can depend upon it to do its part from shot to shot at all crows and chucks from 100 yards on out. Personally, I can see no sport in shooting a chuck at much less than 200 yards unless strictly head shots. Don't expect to be an expert without practice. Shoot and keep on shooting, then shoot some more. In other words learn to reload and shoot for proficiency. Excellent ballistic charts are available—study them carefully and know YOUR WOODCHUCK RIFLE.

**SAFETY OF HIGH SPEED BULLETS** is demonstrated here to show bullets disintegrate upon impact on a can of water. Note the water goes up in vapor.







# Aim To Score

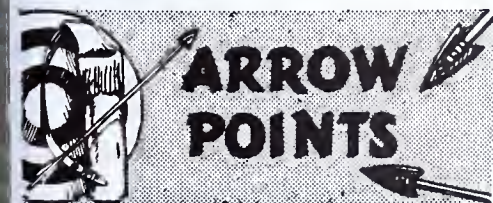
By Tom Forbes

**T**IME changes all things. Man is a creature of habit and instinctively resists any attempt to change his daily routine. New ideas are viewed with suspicion and frequently are accepted only after some courageous individual has demonstrated their worth. "Let George do it," is a phrase frequently used to ridicule any proposal to change our accustomed way of doing things; but when George does do it and is suc-

cessful we are frequently forced to change our methods if we are to compete on a basis of equality with George.

Change occurs slowly and imperceptibly on a day to day basis. Only when we look at the past can we measure the startling changes that have taken place in the world in which we live and the effect they have had on each of us. Change may be detrimental as well as beneficial. A fad may be short lived but it may cause untold damage before it is discarded and reason once more governs our actions.

The past decade has been a period of accelerated change in the sport of archery. Since the war there has been



a revolution in the bowyer's art. Materials, unknown twenty years ago are used in the construction of the modern bow which far excels in performance the self bow made from a single billet of wood. True, the laminated bow is not a modern invention. Centuries ago the Turks and Mongols had recurved, laminated bows but the materials used in their construction were inferior by modern standards. For several centuries and until the advent of fire arms, the English long-bow dominated the field. No examples of this bow have survived but written accounts tell us that it was a self bow made of yew with straight ends and possibly six feet in length.

The modern controversy over free-style and instinctive techniques is part of the continuing effort to master the art of shooting a bow. Sights are a recent innovation but there have been almost as numerous variations of the draw as there are races of mankind. The three finger draw which we accept as the "only" proper method is not universally used even in the present day. In Asia the thumb ring is used to draw the bow string with the thumb. Two fingers are frequently used and in some parts of the world the arrow is pinched between the thumb and first joint of the forefinger. The arrow has been shot from either side of the bow and the draw made all the way from the ear to the chest. Of one thing only can we be certain and that is each of these bowmen was attempting to develop a technique that would enable him to hit the mark with consistent regularity. Primitive man was dependent on his skill with the bow for both food and safety. I think that we can agree that these bowmen had one thing in common. They would use any means or method to improve their marksmanship.

Organized archery in the United States dates from 1878 when the

National Archery Association was formed. Target shooting dominated the field. Scores improved as tackle and equipment were developed. Point of aim shooting was perfected on the target line. This method was still in use as late in 1940 and many of the top scores were made by point of aim shooters. During this period archers began experimenting with sights which could be adjusted for the standard yardages shot in tournament target competition. Bow sights are now standard equipment on the target line. Prior to this period few archers hunted with the bow. Pennsylvania was the first of the states to legalize the bow as a means for taking game. From 1929 until 1951 bow hunting was enjoyed by a few archers. These men were primarily target archers who liked to hunt and they started to carry their bow into the hunting field. A number of these old timers still shoot with a sight on the target line and use the hunting aim and high anchor when they go into the hunting field. The Pennsylvania State Archery Association was formerly composed almost entirely of target archers. Its primary purpose was and is to promote the sport of archery in all its phases in the State. Due to the interest of the bow hunters within the organization the association promoted and worked for a deer season for archers only. The necessary legislation was enacted and in 1951 the archery deer season was enjoyed by 5442 bowmen who took 32 male deer with the bow and arrow.

Prior to 1951 field archery was almost unknown in Pennsylvania. The archers deer season marked the rise of the field archer in Pennsylvania. Today the field archer dominates the sport in Pennsylvania. Hundreds of field clubs have been organized and are member clubs of The Pennsylvania State Archery Association. 72,918 licenses were issued for the 1958 any deer season of 18 days



duration in Pennsylvania and the bowhunters bagged 1358 deer. Pennsylvania has climbed to the number one position in the nation.

It is quite natural that the sudden growth of field archery in Pennsylvania would present problems. The primary interest of the field archer was to use the bow in the hunting field. As newcomers to the sport of archery they were hesitant about joining the predominantly target archer clubs. It was widely believed that a field archer using the high anchor and hunting aim could not compete on terms of equality with the target archer who used a sight on his bow. In the early stages many of these clubs restricted their membership to bar the sight shooter from competition. There was a general feeling that the sight shooter would always win in competition. They had been led to believe that shooting a bow was a matter of instinct and

failed to realize that the old line target shooter who used a sight had spent years developing his ability to hit the target. Probably because they had nothing to fear from beginners the old line target clubs welcomed these newcomers and made no stipulations as to what equipment they could use or what method they employed to shoot a bow. Some of the field clubs tried to solve the problem by setting up two divisions within the club; one for sight shooters, commonly called "free-style" and the other for bare bow shooters or the "instinctive group." This insured that every archer could compete in their tournaments; at the same time it prevented the free-style archer from sweeping the field in competition. To increase their membership from the new crop of archers the old line target clubs set up field courses and they too adopted the two divisions for competitive shoots.

FIELD ARCHERY was almost unknown in Pennsylvania prior to 1951. Today the field archer dominates the sport. Hundreds of field clubs have been organized and Pennsylvania has climbed to the number one position in archery throughout the nation.



Gradually it became evident that a change was taking place. The field shooters gradually mastered their weapon and found that they no longer had to concede first place to the sight shooter. As they reached the expert class they welcomed the opportunity to match their skill with the free-style shooter. Since in any group of archers there are at least ten novices to one expert it slowly became evident that these arbitrary classifications were causing a multiplication of paper work and duplication of awards at considerable expense.

Today we are moving rapidly toward the abolition of the two division set up. The movement started in the older field clubs and has gained such headway that it has been adopted by several of the conferences in the state. The myth that an "Instincter" could not win against a free-style archer has been proven false. The skill with which you handle your weapon is the only thing that counts. You acquire that skill by constant and painstaking efforts to perfect your shooting form . . .

Every attempt to divide archers into groups on the basis of their shooting method or the type of equipment they employ is doomed to failure. The rank and file of archers are primarily interested in hitting a designated target. They enjoy shooting with one another regardless of shooting style or type of equipment. The appellation "Bowhunter" cannot

be acquired in its true sense by carrying a membership card in an organization of that name. When the man or woman behind the bow is a marksman and has learned to shoot well with a weapon of his choice, when he or she can stalk a deer to within bow shot, and trail and recover the quarry after registering a hit; then that person is a Bowhunter.

A glance at the scores of the top ranking shooters in the Pennsylvania State Archery Championships is a case in point. In the 1958 Field Championship Tournament the top position went to Bob Kaufhold, Jr. shooting free-style while Jay Peake, former NFAA Champion came in ninth. However in the State Target Championship Tournament Jay Peake was second and only eleven points behind the winner, Charles Hein, the defending champion. Kaufhold trailed Peake by 25 points for the fourth place spot.

Perhaps we are not ready for it, but the day is coming when divisions will be abolished in Pennsylvania and the State Championship Tournament will consist of at least a field round and a single or possibly a double American round. The winner will truly be the Champion Archer of the State of Pennsylvania. He will have earned the title not because of the type of equipment he uses, not because of the method he employs but because he is the best marksman at that particular tournament.





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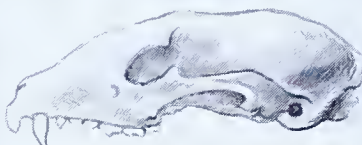
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# RACCOON (PROCYON LOTOR)



RANGE



SKULL, SIDE VIEW

PAWS  
LEFT FORWARD



LEFT  
HIND



TRACKS



P38.34  
1.6  
c1

# PENNSYLVANIA GAME NEWS

JULY, 1959

TEN CENTS





## THE STORY BEHIND THE COVER

**F**OR the amateur, and even the professional ornithologist, no family of birds is more difficult to identify than the warblers. These species are small and agile and usually inhabit treetops where it is hard to see them. The family includes a large number of species—over 50 in the United States alone—and they change coats almost as fast as a chameleon, wearing different plumage in the fall than they do in the spring. Most warblers are not gifted songsters, uttering only a weak trill and most of them are seen only for short times in any given locality as they move north or south in migration.

Still there is one warbler which is unusually beautiful and conspicuous. The American Redstart, shown on this month's cover, is well known to warbler-watchers. Its fan-shaped, flame-colored tail tipped with black makes it truly distinctive. In its wintering grounds, the Cubans call it "little torch" which perhaps is the best common name of them all.

Like most of its family, the Redstart is a bird of the forest. Most Redstarts nest to the north of Pennsylvania, moving through the Commonwealth to the breeding grounds during May and south again starting in September. But in some areas of the state, the Redstarts are summer residents, notably in all the western counties as far east as the mountains. The nests are generally found in woodlands or pastures, in a crotch of a tree from five to 20 feet above ground. An average of four eggs are hatched, the young being on the wing by the end of June.

Here is an insectivorous bird, a typical "flycatching" warbler. Its food includes caterpillars of many sorts as well as moths, gnats, beetles, grasshoppers, flies and other insects—many of them caught on the wing although the bird is an excellent gleaner among the leaves and branches of trees and shrubs.

Although warblers and other songbirds may have no easily recognized economic value to hunters, every true sportsman sees in them something of merit. And certainly the outdoors would be a much less attractive place if there were no bits of beauty and song such as the American Redstart.









# The National Rifle Association of America

**T**HE United States of America today is the greatest nation in the world because it is dedicated to human dignity and freedom of the individual. Much of its strength is derived from loyal citizens who, individually and in organized groups, endeavor to sustain and promote the basic values of the American way of life.

Among the outstanding organizations championing "Americanism" is the National Rifle Association, composed of more than 300,000 patriotic citizens whose many varied interests touch common ground through their interest in guns and shooting and their love of country. This powerful Association is dedicated to FIREARMS SAFETY as a public service, MARKSMANSHIP TRAINING for national defense, and RECREATIONAL SHOOTING. It believes in the fundamental right of an individual to keep and bear arms and stands squarely behind the premise that the lawful ownership of firearms must not be denied American citizens of good repute, so long as they continue to use such firearms for lawful purposes.

This is a non-profit organization recognized as the leading authority in the field of firearms safety because of its nationwide instruction program for the youth of America. It is convinced that the educational approach is the most effective method of avoiding gun accidents in the home and afield. Its training courses and instruction guides, which have been developed as aids in teaching proper gun handling, are designed for use in any community where public spirited citizens desire to apply to the problem of gun accidents the same principles of safety education now being made available to young swimmers and automobile drivers. The program is conducted by more than 30,000 volunteer NRA Certified Instructors in schools, summer camps, and other youth groups in cooperation with state agencies and local organizations. No other agency does as much for the education of our people in firearms safety as does the National Rifle Association.

Here is a powerful influence in America. It is highly respected for fairness, logic, and a wealth of information concerning firearms and their use. Its official journal, THE AMERICAN RIFLEMAN, is the finest publication on firearms and shooting available anywhere in the world.

The National Rifle Association of America constantly has directed its efforts at blending the natural appeal of guns and shooting into a program of activities which advance and defend the basic values of the American way of life.

—From an editorial in the May, 1959 issue of  
"The American Rifleman."







# WALKIN' SHOES

By NED SMITH



## Baron of the Fencerows

1. Groundhogs live in the abandoned burrows of skunks, opossums, and other animals. True or false?
2. What is the difference between a groundhog and a woodchuck?
3. What is the groundhog's chief natural enemy?
4. In what way do groundhogs help to maintain a population of rabbits?
5. An average adult male groundhog will weigh five pounds. True or false?
6. Groundhogs climb trees. True or false?
7. The groundhog's high body temperature keeps him warm during hibernation. True or false?
8. How many entrances does a groundhog's burrow have?

**"S**UMMERTIME—and the livin' is easy." Those familiar words from *Porgy and Bess* could well be the portly groundhog's theme song, for the whole summer long he does nothing but stuff his belly and sleep. One might excuse the lazy rascal on the grounds that no one has much ambition on a hot summer day, but for the fact that he *never* does anything but eat and sleep. For that matter, in the wintertime he does nothing but *sleep*.

You'd think such an indolent, over-stuffed creature would be a

pushover for every predator that came along, but that would be selling him short. For one thing, the groundhog, woodchuck, whistle-pig, chuck, or whatever you want to call him, is not exactly a puny individual. An average adult male will measure more than two feet in total length and tip the scales at nine or ten pounds. A really big one will go thirteen pounds or better. Furthermore, he is armed with a set of ugly, chisel-shaped incisors that protrude  $\frac{7}{8}$  of an inch from the gums, and he knows how to use them. True, Bre'r Woodchuck always prefers running to fighting, but when cut off from his burrow he's a tiger. And the way he bristles and clicks his teeth you know he means business. Strangely, the wily red fox can shake the life out of every woodchuck he catches away from the den. In fact, they probably form the bulk of his summer diet. Experienced farm dogs, too, can generally handle the biggest and toughest. But humans, city mutts, and lesser creatures had better let Bre'r Woodchuck alone.

Another characteristic that keeps the groundhog's hide intact is his extreme weariness. Never does he emerge from his den without first listening intently from within for sounds of possible danger. In fact he'll usually make another stop with

only his head above ground to look and listen some more. Satisfied that everything in the immediate vicinity is o. k. he'll cautiously waddle out onto the mound of earth on his doorstep and sit bolt upright, scanning the surrounding landscape with a suspicious eye. The most trifling strange sound or movement will cause him to scurry right back into his hole.

Even when feeding the chuck ventures no farther from the burrow than necessary and at frequent intervals will suddenly pop upright like a jack-in-the-box for a better view. Many a stalking hunter has been caught off-guard—and off balance—by this unexpected maneuver. The increasing use of long-range varmint rifles that can nail an unsuspecting chuck across two townships has largely nullified the effectiveness of this little trick. Nevertheless, the sudden pop-up still catches quite a few dogs, foxes and close-range hunters with their britches down.

Having an aversion to travel, the groundhog invariably digs his hole where there's plenty of grass, clover, or the like within each reach. If there's a vegetable garden nearby, so much the better. However, it requires a lot of fodder to fatten a ten

pound "pig" for the winter, and when the most convenient herbage has been reduced to stubble he must venture farther from home. In many such places distinct trails radiating from the den mark the routes he takes to and from feeding areas.

The burrow itself is a sizeable tunnel from six to twenty feet long and descending several feet beneath the surface. The main entrance is often at the base of a rock, stump, or tree, and can generally be recognized by the excavated soil at its mouth. As a rule the main tunnel is connected with one or more inconspicuous emergency exits that have been dug from the inside. For sleeping, hibernating, and sheltering the young one or two grass-lined nests are provided.

As fall approaches the groundhog grows fatter and fatter and lazier and lazier, until at last he crawls into his nest, rolls into a ball, and succumbs to hibernation's lullaby. Unlike some of the "seven sleepers" the chuck's slumber is a deep one, a stupor from which he can be aroused only with difficulty. Placed in a warm room a hibernating groundhog will gradually come to, but will promptly slide back to dreamland when the temperature is reduced. In hibernation he lives off his tremendous stockpile of fat. His body temperature drops to approximately that of the surroundings and respiration occurs at intervals of only once in several seconds.

In late winter (but not necessarily on Groundhog Day) the deep sleep of hibernation begins to lose its grip, and between fitful naps the chuck makes frequent but brief appearances above ground. By the time the first succulent green shoots have appeared he is ready and waiting to make a meal of them.

The mating season occurs about that time and the males are often seen wandering about in search of a mate. The young are born after a gestation period of nearly a month. Averaging four or five to a litter the



RIGHT FRONT



RIGHT HIND

FEET OF WOODCHUCK



little fellows are blind and helpless for some time after birth. Not until they reach the age of about six weeks and are able to assimilate solid food are they escorted upstairs for their first look at the outside world. Huddled around Mamma they explore new ground each day, learning what to eat, where not to venture, and what to do when danger threatens. The "pups" are anything but wary in their youth, but do seem to inherit their parents' indomitable courage. On several occasions I've seen fist-sized young ones bristling with rage, defying grown men to so much as lay a finger on them. Their growls and the chattering of sharp little teeth carried all the conviction necessary.

Summer is occupied with basking in the sun and filling their innards with green stuff. In the early autumn, however, mamma figures it's time for them to scratch for themselves, and drives them from the home den. Each goes his separate way and digs his own den in the spot he choses to call home.

Not all chucks make their dens in fields, fencerows, hillside pastures, or farm woodlots. A surprising number reside in the big forests, excavating their burrows beneath boulders or stumps. In fact, before our native woodlands were cut practically all chucks were forest dwellers. Clearing the land produced conditions more to their liking and they are now more plentiful than in the days of the unbroken forests.

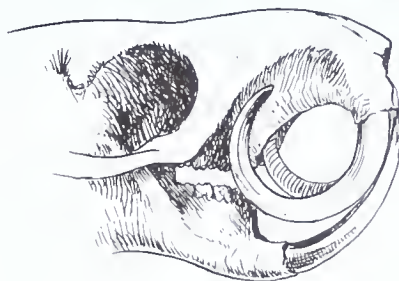
Some folks are surprised to learn that woodchucks can climb trees. True, a roly-poly clover-fattened specimen is anything but agile, but I've seen their leaner brethern of the forests shinny up sizeable trees as slick as a whistle when forced to do so.

Chucks are usually silent, but when alarmed sometimes give vent to an extremely shrill quavering whistle, hence their nickname "whistle-pig." As a rule the whistler lies just inside



ABOVE-NORMAL INCISOR TEETH OF GROUND-HOG. LONGEST MEASURE  $\frac{2}{3}$ "

BELOW-ABNORMAL DEVELOPMENT OF TEETH



the mouth of his den to complain loudly about your presence.

As in other rodents the incisor teeth of the groundhog never stop growing, but are maintained at the proper length by the normal wear of eating. Should one or more of these teeth be accidentally broken, the opposing tooth, no longer subject to such wear, grows at a surprising rate. As a result the teeth are thrown out of alignment and all grow out of control in ever-lengthening arcs. The unfortunate animal often dies of starvation.

It's hard to find two people who will agree on the worth of a groundhog. The average farmer is understandably in favor of getting rid of each and every whistle-pig in creation. To him, their insatiable appetites for clover, soy beans, and garden truck, plus their propensity for digging holes where they menace livestock and machinery, leave him no choice. The chuck hunter, on the



other hand, would like to see a dozen of the grizzled fellows in every fence-row. Few other live targets offer more of a challenge to a souped-up, flat-shooting varmint rifle. Many hunters eat the critters, too—and a young woodchuck is not to be sneezed at. Small game hunters are equally enthusiastic about maintaining a groundhog population on their hunting grounds. Untold numbers of rabbits survive the rigors of winter and the merciless heat of summers by re-

tiring to the shelter of groundhog burrows. These same holes are valuable escape hatches for hard-pressed small game and homes for various furbearers.

The groundhog himself worries about this situation not one bit. So long as he has a good safe den with a comfortable bed and plenty of food within easy reach he doesn't give a hoot who likes him. As a matter of fact, with that sort of set-up we'd probably be just as independent.

### ANSWERS TO THE QUESTIONS

1. False. Groundhogs are confirmed burrowers and the other animals generally take over *their* abandoned burrows.
2. Both are the same animal.
3. The red fox.
4. Their burrows give rabbits valuable protection from their enemies and the elements.
5. False. Twice that figure would be nearer the correct weight.
6. True, although they don't make a practice of doing so.
7. False. During hibernation the groundhog's body temperature is approximately the same as his surroundings.
8. Generally one or two concealed ones in addition to the "front door."

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### OIL MOON OVER PITHOLE

With northwestern Pennsylvania's Oil Centennial just around the corner, a booklet which came off press last winter should be required reading for all Pennsylvanians. "Oil Moon Over Pithole" is a 94-page paperback, illustrated with rare old photographs, which vividly describes a phenomenon that occurred in Pithole City in February, 1866. Written by Steve Szalewicz, outdoors writer for the Oil City "News-Herald," the novel is done in a flashback style in order to dramatically tell the story of Pithole's flood of oil. The booklet is priced at \$1.75 and may be ordered from Drake Well Park, Titusville, Pa.



# The Floating Islands of Pymatuning

By N. R. Casillo



**M**Y first experience with floating islands was some three decades ago on what was then called Long Pond located up in Stoddard, New Hampshire. It was shortly after Jim Bartlett, a one armed resident of the district, dropped into a hole cut through an island by horned pout fishermen, and drowned. Memory of the tragedy is particularly vivid because the only way the body could be recovered was by moving the island, a stint accomplished by no small flotilla of churning outboards.

The two largest islands as well as a host of smaller ones on the widest part of the six mile long pond, were at the mercy of prevailing winds as well as the erratic ones generated by occasional squalls. In a matter of hours the islands could travel from one remote part of the pond to another. When in full flight running before a thirty knot wind the well wooded islands with some trees towering as high as thirty feet, made the Flying Dutchman look like a piker.

Fishing on the islands was a unique experience, the fisherman punching a hole through the entangled mass of root fibers and humus with an oar and then fishing through it much as an ice fisherman fishes through the

ice. Fabulous catches of horned pout were often made even in broad and sunny daylight, for this finny lover of dusky shadows remained active and hungry in the deep twilight under the islands.

Another local man, one Dolf Miller, who frequently fished the islands found himself in the same plight as the unlucky Bartlett except that Dolf managed to swim to safety. His description of lashing tentacle-like roots and the horrors lurking among them were but figments of his imagination, but no one was willing to disprove it.

Practically all of the floating islands of Pymatuning are confined to the refuge area and most of them at this date have ceased their perigrinations since at least some of their roots have managed to make fast to the bottom.

These deviations are created in two ways, the most feasible method being the consolidation of vegetable debris, the mass of drift being held together by the roots of plants managing to have gotten a root hold on the temporarily quiescent debris. Many of this type are scattered widely over the refuge waters and have managed to anchor themselves in the shallow water. However, there are times when



Photo by Don Heintzelman

GREEN FROG is a common occupant on the floating islands of Pymatuning.

a strong wind will dislodge some of them and they drift about at the mercy of the winds until they run aground in the shallow or against some fixed island.

The largest islands are but great slabs of matted roots, humus, logs and other detritus which were actually a part of the bottom. Most of the inundated area was once a swamp so that when the rising water covered it some of the more buoyant sections of the bottom broke off and floated to the top, the buoyancy doubtlessly being imparted by quantities of methane or swamp gas. There are still many places throughout the swamp where one may poke an oar into the bottom and then ignite the surfacing bubbles of gas. Incidentally, this same gas gives some credence to the phenomenon of the will-o'-the-wisp or *ignis fatuus*, the strange phosphorescent glow seen at night, chiefly over marshes.

One of the largest islands so created is located just off of Ford Island, the latter being the one on which the waterfowl museum is located. The island, easily seen from the museum, is a sizeable piece of mucky ground which appeared and disappeared with the seasons until it became "fixed." After the ice disappeared in the spring and the water reached a temperature high enough

to generate gas the island would rise to the surface. With the advent of cold weather in late fall the island would again sink to the bottom. After the interlacing roots of grasses, reeds, small trees and shrubs became consolidated sufficiently to form tight pockets of air and other gases the island remained surfaced.

A considerable number of islands having developed by one or the other of the foregoing methods rise scarcely more than a foot above the surface of the water and are densely covered with various marsh plants, several kinds of shrubs, some vines and a few species of trees in various stages of growth. As would be expected, they provide an abundance of food, adequate cover and many nesting sites for waterfowl and other birds. The shallow water pockets which exist on the larger islands sport luxuriant stands of sedges, cattails, water smartweed, pickerel-weed, arrowheads, various bur-reeds, wild duck wheat, millet and many others. Recently, along the margins of some of the more solid islands have developed some nice stands of the highly desirable calamus, its aromatic root beloved of muskrats which are once again repopulating the area.

Enormous quantities of many kinds of insects are largely responsible for the many species of insectivorous birds dwelling in the Pymatuning. From mid-May to migration time in late summer there is a tremendous bustle among the feathered connoisseurs of succulent insects. The swallow clan, as would be expected, is much in evidence. The emergent vegetation on the floating islands and in the surrounding marsh is ideally suited to the multitudinous insects which complete their metamorphosis on the unsubmerged parts of plants. When a concentration of birds is seen working over the swamp it indicates an unusually large hatch of insects. There is one unidentified Diptera which is especially abundant, at times literally covering much of



the vegetation and even the Game Commission buildings on Ford Island. It probably is equally abundant throughout the entire district. It comprises the main course of many bird species.

The truly prodigious numbers of smaller insects are augmented by more substantial fare such as damselflies, alderflies, mayflies, dragonflies and several large strictly aquatic species which delight the gastronomic tastes of the Amphibians inhabiting the floating free lunch counters. One curious denizen deserving mention is the larval or worm-like stage of the lily-leaf caterpillar. This insect is common in the quiet water among the white pond lilies. It lives in a leaf case made from two sections cut from a pad, the two pieces of leaf being held together by silken strands which the insect spins. While developing it feeds upon the walls of its case, first on the inner one and then on the tougher outside. By the time it has eaten itself out of house and home, it is ready to pupate or rest before becoming an adult.

After the joys, vicissitudes and demands of the breeding season, the frogs settle down to concentrate on building up their emaciated bodies. Soon the perky spring peepers and cricket frogs along with their larger brethren, the leopard, pickerel and green frogs, become sleek and succulent and suitable fare for the feathered and furred inhabitants of the Lucullan isles. The burly bullfrog? He, in lonely grandeur roars the nights away until pounced upon by the omnipresent raccoons or by a wandering mink or what is even more likely, ground between the steeltrap jaws of the giant snappers for which the Pymatuning is noted.

The floating islands with their little captive pools of quiet water and luxuriant plant life provide ideal dwelling places for the snails and other mollusks. Since the water is very shallow, seldomly more than a

couple of feet in depth, the snails occupy all levels of their narrow confines and there is scarcely a nook and cranny which they do not visit. Snails comprise a valuable food supply for all animals larger than themselves. Indeed, there are certain kinds of leeches which feed on nothing else. Giant water bugs, water boatmen, backswimmers, water scorpions, dragonfly nymphs, fishes, frogs, turtles and even muskrats feed more or less regularly on this prolific mollusk.

Now, let's get back to those giant snapping turtles which were briefly mentioned. They constantly prowl about, under and even within the islands, the latter's loose structure permitting easy access to innermost recesses. Of course, they are attracted by the food, lots of food, ranging from frogs to muskrats and even waterfowl.

A hen mallard and her brood of six were once observed attempting a crossing of a quiet island-locked lagoon. The young clustering close to the mother were about half way across the perilous bit of water when one of them darted out of formation to garner a tidbit. With scarcely a splash the little fellow disappeared beneath the surface. If the valiant mother hadn't sounded an alarm and quickly herded her remaining young

SNAPPING TURTLE constantly prowl about, under and even within the islands. They are attracted by the food ranging from frogs to muskrats and even waterfowl.

Photo by Leonard Lee Rue

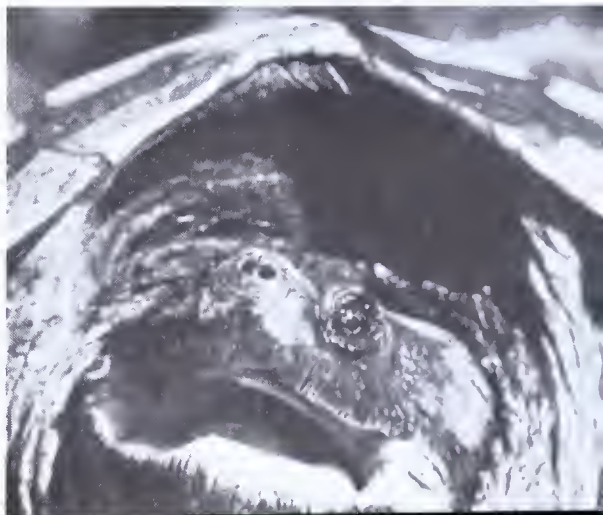




Photo by Don Heintzelman

BLACK-CROWNED NIGHT HERONS are common residents of the Pymatuning. The 3,670 acre sanctuary makes an ideal nesting grounds for them. This pair of young herons won't win any prizes in beauty contests but they improve in appearance with age.

to safety there would have been more losses.

Other reptiles associated with the islands, especially if logs and similar debris make up a part of their structure, are the painted terrapin and the spotted turtle. Both of these familiar forms are often seen arrayed on suitable supports sunning themselves. Excepting on the islands all but touching the shore snakes are seldom observed. But, the good hunting sometimes entices the common banded water snake to the more accessible ones. Once I saw a crow sweep down on a nearby spot in the marsh and fly away with a slender snake clamped in its bill. The reptile's skimpy girth and the fact that it was snatched from the water points to another of the three or four species of water snakes found in the Commonwealth, namely, Kirtland's water snake. Also, it could have been a common garter snake since it too likes marsh situations.

During most of the summer, visitors at the Waterfowl Museum can look out over the vast expanse of the refuge and often see as many as a score or more of great white birds scattered widely over the swampland. Of the many kinds of larger birds inhabiting the 3,670 acre sanctuary, the American egret is one which may be readily identified with the unaided eye. However, between the major spring and fall waterfowl migrations the island studded water harbors many interesting birds. Besides the several species of "summer" ducks there are two or three species of rails, notably, the Virginia and sora and occasionally, the king rail. The great blue, little green and the black-crowned night herons are common. Then, there are bitterns, grebes, gulls and gallinules.

Somewhat over a mile straight out from the observation terrace in front of the museum lies a string of several small floating but anchored isles.



During May and again in October, double-crested cormorants use the islands as vantage points from which to launch forays after quarry and then as resting places to digest a heavy meal. The more remote or well hidden islets are frequently used by nesting Canada geese. Likely territory where these may be found is along the eastern shore extending from the vicinity of the fish hatchery south to the Blair Bridge Road. Outside of the refuge the line can be projected all the way to Hartstown, in all a stretch of nearly eight miles of excellent waterfowl environment.

The larger mammals which doubtlessly profit from the islands include raccoons, beaver and deer. The swamp raccoons were formerly highly prized by old time cooners for their great size and sagacity. Even in these times of low fur prices the musical buglings of coon hounds may ride the nocturnal air currents to tug at the heartstrings of those within earshot who love the sport.

One would think that the deer would avoid the morass which most superficial observers believe makes up much of the sanctuary. Besides the scores of insecure islands there are many sizeable well wooded ones largely frequented by deer. Since the animals are seldom if ever molested they wax fat on their swampland fare. Often several of the animals may resort to a single island for their daytime siesta.

Some years ago Game Protector Ray Sickles and I were exploring in the vicinity of the Corduroy Road on the east side of the refuge. Beaten trails of the white-tails were on every side leading both to the well wooded permanent islands as well as to the low-flying quaky morasses. Since it was high noon of a hot day we figured that we might surprise some of the animals on a well wooded mound immediately in front of us.

Our stalk took us first through a considerable stand of cattails, and

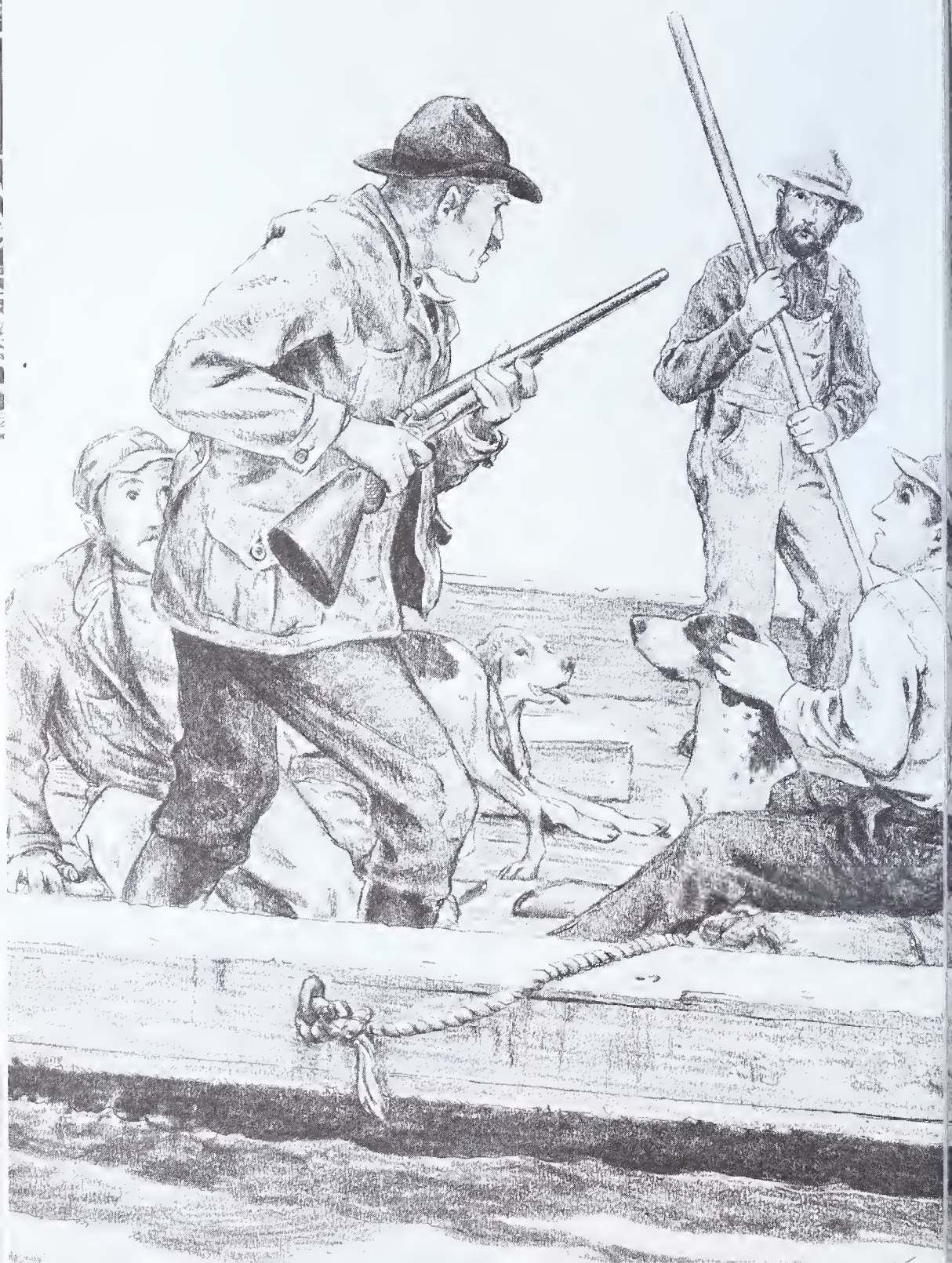
then through a tangle of small trees and shrubs on the island itself. As we had surmised, the deer were there, five of them actually, ruminating drowsily while bedded down in a copse of black alders.

They detected us while still 80 or 100 feet away. As one they sprang to their feet and rocked away to more distant cover. Though I have seen them do it many times I can never cease wondering how the small hoofed creatures can negotiate the squashy ground with such celerity and speed.

Bogs and even fairly stable ground mark the sites of former lakes and ponds. Encroaching shore vegetation is but the beginning of a long reclamation process. The shallow lake in the Pymatuning Refuge will some day revert back to what it was originally, a swamp, and the floating islands will measurably hasten the action. How long will it take? Well, I have talked with men who caught horned pout in a pond which later became the site of the railroad depot in my home town up in New Hampshire. Closer to Pymatuning, in the thirty years that I have known it, the pond in the middle of Mercer Bog has been reduced by one third.

PIED-BILLED GREBE makes its nest on floating vegetation, laying an average number of six eggs. During August and September these grebes frequent the spatterdock beds in the refuge area.







# A Hunt From The Past

By Herbert H. Beck

**M**Y Diary of Fieldsports, which I began in 1885, and which I wrote continuously for sixty-five years, recording everything I ever shot, undoubtedly had its original incentive from Warwick Woodlands. Warwick Woodlands, by Frank Forester, was the favorite book of my early youth. I knew its sentences almost by heart. Harry Archer, of this seven days of shooting in Orange County, New York, was my ideal sportsman. Tom Draw, the sporting inn-keeper of the story, was a type I soon learned to know personally. I even knew a man in the 1890's who was personally acquainted, in his youth, with the Tom Ward, whose name Forester reversed into Tom Draw. This Oxford-educated Englishman, of nobility, Henry William Herbert (1807-1858), who came to America in 1831 to become, under the name of Frank Forester, America's first popular writer on Fieldsports, was the man whose writings started my Diary of Fieldsports. I even liked to think, as a boy, that I was named for H. W. Herbert rather than for another Englishman I admired, Herbert Spencer. Forester's tragic death, by his own hand with a duelling pistol, at a final party he had arranged for a few friends along the Passaic River, New Jersey, was a personal calamity to me.

I wish Frank Forester could have been with me, as a writer, on my hunting trip of November 7 and 8, 1902. How I wish I could read of this in Forester's own breezy style! But without Frank, here is the story. Tom Keller and Bert Beck, of Lititz, Pennsylvania, and Tom Anderson, of nearby Lancaster, as recorded in my Diary of Fieldsports of November 7 and 8, 1902, set out for McCall's

Ferry on the Susquehanna, in the late afternoon of November 6. The destination—good hunting country in nearby York County. A two horse team carried the three men, their guns, shells and field equipment, and three pointers, Duke, black and white, the senior of the group; Colonel, liver and white, Duke's pal from Tom Keller's kennels; and Rex, lemon and white, belonging to Anderson. Over the good roads of central Lancaster County the party came to the rough roads of the River Hills. When it went down the last steep hill leading to the McCall's Ferry hotel twilight set in. Here the horses were stabled, to be recovered two days later.

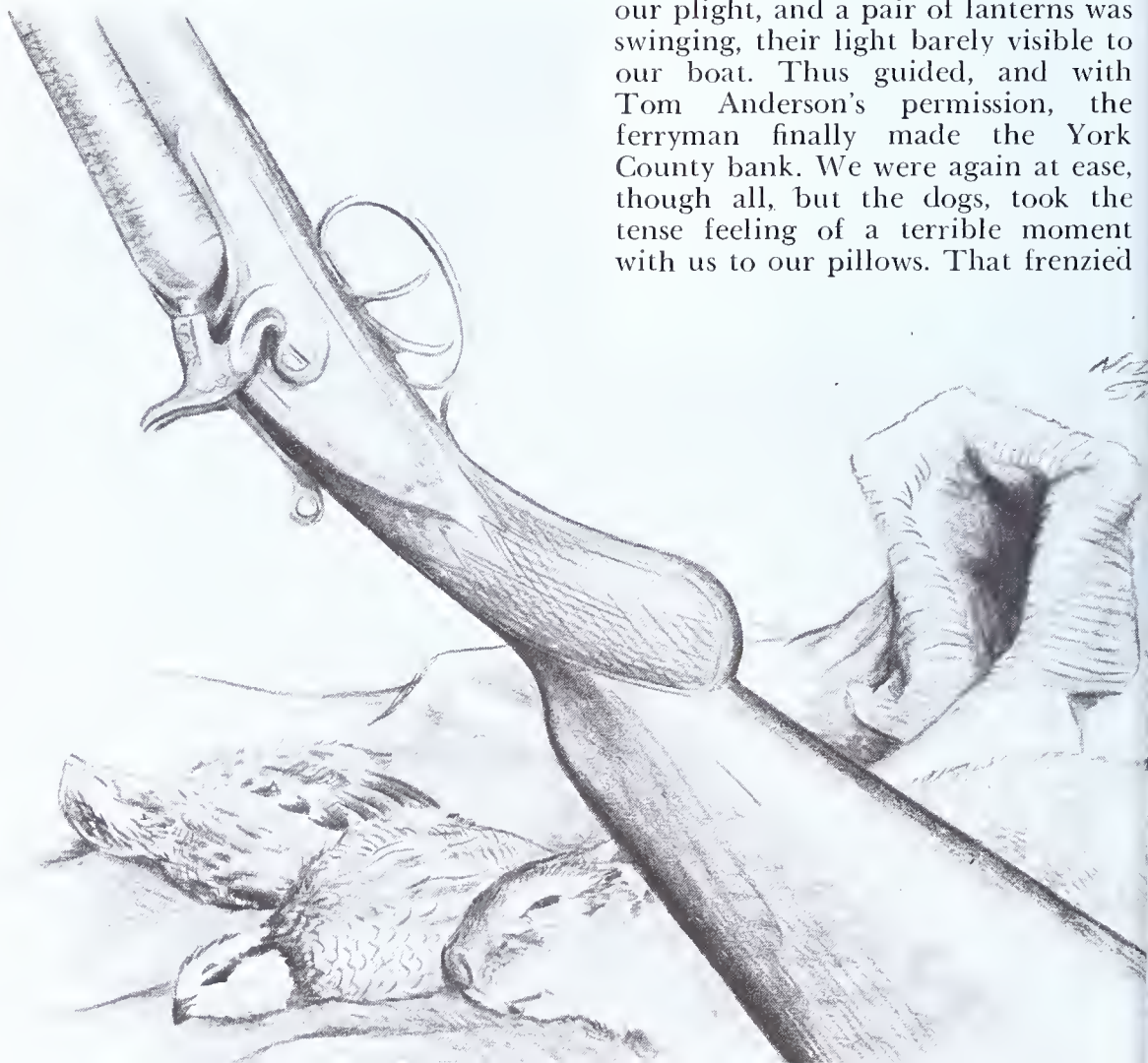
But a word of the hunters. Tom Keller, a Lititz pretzel baker by trade, was a leading sportsman who always had the best dogs in town. A happy-go-lucky man in business, his heart was always "in the Highlands a hunting the roe." It was he who broke in his young friend, Bert Beck, for the field. The latter, while living in Lititz, had a year before, been taken into the faculty of Franklin and Marshall College as professor of chemistry. Tom Anderson was a Lancaster figure of note. A powerful man, 6' 1", about 210 lbs., he could more than hold his own in any dispute. He was a brave, warm-hearted man, who had become famous in many a fire-fighting incident as engineer of the Lancaster Fire Department. He was one of Lancaster's best shots with a shotgun.

It was dark when the hunters and dogs piled into the flat-bottom, rectangular ferry boat, about 6 by 12 feet, which was to be poled to the York County side of the river, about half a mile away, by the solitary boat-

man. A fog was rising, but the boatman, knowing the rocky river course like a book, took off anyway. Then it happened. When the boat was about half way into the course a London pea fog fell. Visibility was zero. We could not see a yard in the blank darkness. The experienced boatman was lost, his pole trying to hold his boat in position against the current. The only sound in the blankness was the rattle music of Cully's Falls, immediately below in the river. And that, even to the boatman, was an ominous sound. Cully's Falls, from logging days, had always been a danger spot of the Susquehanna. Then, suddenly, in the tense moment, there occurred the most amazing act I have ever witnessed. Big Tom An-

derson, who could not swim, and who well knew Cully's Falls, lost himself entirely in terror. Trembling from head to foot he loaded his gun, aimed it at the boatman, and with an oath, commanded him to stop at a rock. Terrorized Tom meant what he said, and the bewildered boatman obeyed.

It seemed hours that we were on that rock, hearing nothing but the voice of Cully's Falls. I do not remember being much scared. I was thinking of Washington, similarly marooned in a Susquehanna fog, up river on a rock at Wright's Ferry, as I knew had once been the case. Swinging lanterns through a distant fog look like fireflies. That is at last what we saw on the York County side. Somebody there had realized our plight, and a pair of lanterns was swinging, their light barely visible to our boat. Thus guided, and with Tom Anderson's permission, the ferryman finally made the York County bank. We were again at ease, though all, but the dogs, took the tense feeling of a terrible moment with us to our pillows. That frenzied







act, with a loaded shotgun, was never mentioned again, though it must have held the boatman the rest of his life. We spent the night at the McCall's Ferry hotel, there on the York County bank. The next morning we hired a man to drive us to the farm of Nelson Gambel, about five miles from the river. Nelson greeted us warmly, and, though he did not hunt with us, he would have us come in to an excellent farm dinner at noon. In rolling country there, with many woodlots, we found five or six coveys of partridges (bob-whites). The dogs, with one or two exceptions by Rex, respected each other's points and we had a good day. Throughout all these years I can clearly remember how Tom Anderson reprimanded me for not leading a crossing bird enough. Toward evening we worked to the famous Brogue Tavern, where we spent the night. Here at the Brogue, a typical country inn of the past, under oil lights in a smoke-filled bar-room, there was convivialty galore. With the game of the day, 15 partridges and 8 rabbits, spread on a table before us, the jovial host (now Tom Draw to me) entered into the

jest and banter of the occasion. With the game protected by ample cover, the best we could do next day was 10 partridges, 3 rabbits and a woodcock. In late afternoon we tramped it back to the river, hoping to get a shot or two at pheasants (ruffed grouse), which were still in the heavily wooded River Hills at that time.

Come to our ferryman, with no words said, we were poled, now in clear light, to the Lancaster County side. Here at the McCall's Ferry hotel there was a special demonstration. With 25 partridges, 11 rabbits and a woodcock spread on the bar, there was beer for the house.

My records show on this hunt, to my gun, 8 partridges and 5 rabbits. I always kept an individual score. That is why I know today that my total score of all the game I ever shot in sixty-five years afield is 1344.

Today McCall's Ferry and Cully's Falls are covered by the impounded waters of the Holtwood dam. Their names are known only on old maps. But persistently lingering in the memory of one of that hunting party of 1902 is the ominous music of Cully's Falls and the barely visible distant sight of fireflies dancing in a pea fog.

# Summer Time Is Bowhunting Time

By Bill Cochran

**Y**OU would have a hard time finding a group of sportsmen who received more hours of enjoyment from their sport than bowhunters. In the fall and early winter, there is the enjoyment of game season. With

spring comes the fun of tournaments, stump shooting, and bow fishing, while summer brings the thrills of varmint hunting.

When varmint hunting is mentioned, most bowhunters are quick to think of woodchucks, because the two make up a delightful pair. The word varmint may have a lowly sound, but there is nothing lowly about the woodchuck. This keen little rodent of the squirrel family can provide thrills you'll never forget—thrills you'll even have a hard time matching in big game bowhunting.

Finding a place for chuck hunting is usually not a problem. His dens can be spotted on the hills and in the meadows of thousands of acres of farm land. You will find that most landowners will be glad to have you hunt him because sometimes he makes a nuisance of himself by digging unsightly holes and destroying crops.

Most bowhunters have a pet method of hunting chucks. Some like to conceal themselves near a chuck's den and wait for him to make his appearance. While using this method always try to be sure that there is a chuck living in the hole that you are watching. If possible, try to find a spot where you can watch several chuck holes at one time. Home is very important to a chuck. He seldom travels far from it, so you can bet that it will be in the center of his food supply. Likely spots for his dens are near gardens, along fence rows, under brush piles and in clover or alfalfa meadows.

I find much more fun trying to stalk a chuck rather than waiting in a blind for him to emerge from his hole. If you are familiar with the territory you are hunting, you will be much more successful at stalking,





because then you can spend your hunting time carefully stalking productive places. Most bowhunters who use this method find a good pair of binoculars to be a very helpful hunting aid and leg saver.

No matter what method you use, the best times of day for chuck hunting are mornings and evenings. On hot summer days, midday will usually find a chuck sleeping in his den leaving the cooler parts of the day for feeding periods. While feeding, a chuck is usually fairly easy to spot, but it's a different matter when it comes to getting close enough for a bow shot. His telescopic eyes are quick to spot anything foreign in his habitat. When stalking him, keep behind objects such as hills, trees, or brush. If this is impossible, get down on all fours and advance when he has his head down feeding, but be ready to freeze when he stands erect on his hind legs to comb the territory for signs of danger.

A chuck, much to his unfortune, has a trait that often leads him to his doom. This is an unquenchable curiosity. If, at the slightest hint of danger he would always dive for the safety of his den, his population would be much greater; but alas, the poor creature is even more curious than a cat. Keep this in mind when you direct your attack. Watch him closely just after he senses your presence or is startled by a close arrow. He may pause a few seconds to try to spot you, or he may run a few feet toward his den and then stop to look back over his shoulder. Don't give up hope on the chuck that madly dashes into his hole without looking to the right or left. If he has not seen what startled him, there is a good chance that he will cautiously peek from his hole, trying to catch a glimpse of his intruder. The amount of curiosity a chuck has will vary according to his age and experience. If he is the victim of constant sniping, his curiosity will be greatly curbed and your



Photo by Leonard Lee Rue

chances of getting him will be reduced.

One advantage of bowhunting is its deadly quietness. When shooting, if you are well hidden, misses often won't startle a chuck. More than once, I have shot my quiver dry at chucks who regard my arrows as nothing more than passing birds.

Because of your bows limited range, you will have to do a good job of stalking in order to have hunting success. When you get as close to a chuck as you dare try, and the shot is still a difficult one, don't be afraid to try. You have nothing to lose. Even if you do miss, you will be able to collect your arrows for future use, and besides, misses are even lots of fun in bowhunting.

Chucks and crows represent only two of many varmints that bowhunters can hunt, but they top the list. Not only will you find superb pleasure hunting them, but you will also greatly increase your hunting and shooting skill. If you keep after them throughout the summer, you'll be ready when the cool winds of fall blow in game season. You'll have yourself a masters degree in bowhunting.

# Borrow Your Rifle, Buddy?

By Francis W. Kemp

**T**HE average American rifleman who hunts sooner or later becomes involved in a situation where the possession of a spare rifle would rescue him from an embarrassing position. Dropping your super-duper magnum and splintering the stock is no laughing matter whether on an extended western pack trip or merely alighting from an automobile on an eastern deer hunt. Whittling a new stock from a limb of the nearest tree is rather exasperating, and trying to talk a gunsmith into dropping everything and concentrating on your problem requires more tact and eloquence than trying to inveigle a

commitment out of Khrushchev. To be sure, they sympathize with you but unless you are very lucky you will have to take your turn in line with other emergency jobs that seem to crop up every hunting season.

Eventually, also, there comes a day when someone asks for the loan of your rifle. A casual acquaintance can be dismissed with the blunt statement, "Sorry, I never lend my rifle to anyone," but try that statement on your best friend and shooting buddy and somehow the words stack up in your larynx. Of course, your friend won't even ask to borrow your rifle—he will merely relate the terrible accident that happened to his weapon in the middle of the gunning season and, seeing that you have made your kill or are unable to hunt the next few days, you find yourself placing your pet in his hands and wishing





him luck. A lump comes up in your throat when he departs but you know he will take as good care of your property as humanly possible and, after all, friendship can not be valued in dollars and cents.

Again, you may have a family problem. Two brothers, four brothers-in-law, eight uncles, thirty first cousins, etc. will put you in a spot sooner or later. Let's face it—a spare rifle is a right handy gadget when it comes to keeping peace in the family or making an impression on your daughter's boy friend.

Mr. Average Sportsman owns a rifle in very good condition and, as hunters are found in all levels of life, you can be certain that many of these men saved nickels and dimes on their carfare, tobacco money, and other everyday necessities to purchase what they believed to be the best rifle obtainable for their purposes. It would be economically impossible for them to duplicate their favorite firearm and the logical solution is a good second-hand rifle at a fair price.

One of the better methods of locating a bargain is by inquiring at your local gunsmith's. Once in a while he will know of a good buy or be acquainted with someone who intends to trade his rifle on a new piece. At times, however, no local rifles are available and the hunter is forced to look elsewhere. In recent years various arms companies throughout the U.S. have imported thousands of foreign arms and these are selling like hot cakes. National advertising has reached sportsmen everywhere and the low prices quoted have sent many a hunter reaching for his pocketbook. If this impulse strikes you, now is the time to **STOP—LOOK—and LISTEN**. OK—now that your money is safely back in your pocket, let's take a look at the average advertisement. The rifles being offered for sale are all bargains—but not necessarily for you. The firearms collector can pick up some outstand-



ing, low-priced items for his collection but the majority of these have had their day and are not suitable for hunting; in addition, modern smokeless powders with accompanying high pressures make the majority unsafe to shoot. Rare old weapons are all right in their place but, except in unusual circumstances, have no place in the field. Some rifles, however, are listed as unbelievable bargains for hunters. Now is the time to place that advertisement in your pocket and drop in on your favorite gunsmith to **LISTEN** to what he has to say. Tell him you are looking for a spare hunting rifle at the lowest possible cost and you will find that he understands your problem. High pressure copy and photographs of men facing kodiak bears at six paces won't faze him one bit. He knows that any hunter getting that close to game without anchoring it needs at least a 20 MM cannon, and not a relic discarded by modern day descendants of Genghis Khan. Rifles and carbines selling for slightly more than ten bucks, of recent WW II vintage, never issued, but of a caliber for which it is impossible to buy ammunition or reloading equipment, are promptly ruled out. Of course



the seller has all the ammunition (military type) you will ever need but that is useless for your purpose. Within a short time the selection is narrowed down to a few rifles and all of these are of the calibers for which you can walk into a store, plank down your money, and walk out with shells to fit. In every case reloading tools are available in the event that the major ammunition companies discontinue manufacturing that particular caliber.

This past spring I followed the above procedure almost exactly and after a conference with my gunsmith

ordered a "Model 95" 7 MM Mauser carbine guaranteed to be in good condition, and priced at \$19.95, from an advertisement in the *American Rifleman*. Ordering from the *Rifleman* was done deliberately because of their insistence that all articles accepted for advertisement must be properly described. About 30 days later the rifle arrived, parcel post collect (\$2.10), and on unpacking it my first impression was that I had thrown away twenty bucks. It looked somewhat better after the light coat of grease was removed and the entire mechanism cleaned. The rifling and barrel were in very good condition, the safety worked, and the bolt looked OK. Next step consisted in purchasing a box of shells for \$4.55. Was it ready for firing? Not yet—another trip to the gunsmith was in order to check on the headspace. The bolt was numbered differently than the action but it checked out all right and was found ready for the first test firing. Using a bench rest at 100 yards the first shot was four feet to the left and five feet low. Bore sighting confirmed the fact that the sights were way off and an examination of the military adjustments revealed that it would be impossible to properly align them. The soldier who used this carbine certainly never hit anything he was aiming at except by accident. The firing pin made a deep impression in the primer that looked suspicious and another shot was touched off to check it. This time the pin almost ruptured the primer so the proceedings were brought to an abrupt halt. A close examination of the bolt indicated that the firing pin had probably been replaced in the past and that the new one was a little too long. A little was honed off the pin and this apparently cured the trouble as primers in the shells fired thereafter appeared normal.

The carbine was obviously unfit to use for hunting purposes and another conference with the gunsmith



was in order. Holding expenditures to a minimum, the gunsmith removed the old sights and swivels, and shortened the stock sporter style. The latter involved inletting a piece of wood to fill the gap left by removing the cleaning rod. The magazine follower was ground to permit closing of the bolt without the use of the left hand when the carbine was empty. New sights were purchased and a ramp was installed under the front sight. It was necessary to place a metal shim under the front of the ramp as the barrel had been turned down the last inch. This could have been avoided by cutting one inch off the barrel but it was thought inadvisable to shorten it below 22 inches without being certain what effect this might have on grouping the shots. New sling and swivels were fitted. The total retail price for parts came to \$14.60 and the labor charge was a mere \$3.00. The completed carbine weighs seven and one-half pounds and, contrary to most 7 MM's, kicks like a Missouri mule. Sometime in the future a recoil pad will be installed and the stock refinished. Let's call the cost \$50 in round numbers which is not too bad—but if it were not for the fact that the cost of gunsmith labor was almost negligible the cost would have been at least \$75.

Now let's take a look at the completed carbine. It is a good spare weapon for any big game found on

the North American continent with the exception of kodiak bear. Ballistically speaking, it is superior to the popular 30-30 but not quite up to the 30-06. Reloading is permissible but the soft Model 95 action with only two locking lugs will not permit loading up to maximum pressures and it will be impossible to bring out the full potential of this fine caliber. To date with commercial ammunition it has functioned perfectly and it should serve its purpose.

If \$75.00 is too much money for you to put in a spare rifle, how does \$15.00 suit you? Yes—for fifteen bucks you can purchase US Cal. 30 M1903A3 supplied in unserviceable condition and for several extra dollars any gunsmith will check it and it will be ready to go. The action is strong and you can reload to your heart's content (following recommended procedure). Membership in the National Rifle Association will entitle you to order this rifle from the Director of Civilian Marksmanship and it is your best buy as it can be used as is and remodeled later into an excellent sporter if you desire. How do I know? Well, it's another story but I ordered one of these rifles too—you see, I am the fellow with all those relatives referred to in the beginning of this story and in addition, am raising a couple of boys myself. I need an arsenal—not a spare!





Photo by Leonard Lee Rue

# Night-Time Skysweeper—The Bat

By Wilbert Nathan Savage

**I**F you find it difficult to think of the bat as a *bona fide* mammal, you aren't alone. For even in this modern age it is still possible in some quarters to drum up a wager *supporting* the claim that bats lay eggs and hatch their young. But even the obstinately wearisome fellow who last year found the "bat's nest full of brown eggs" while painting the church belfry must finally succumb to enlightenment. For the bat is as solidly entrenched in the mammal order as the twelve-point buck you missed last year, or the dam-happy beavers who've been working the night-shift over on Bearpaw Creek.

Some two thousand different kinds of bats inhabit the world. The body of one type is no larger than a shrew, while several kinds of fruit-eating bats of the tropics boast wingspreads of five feet. There are many different types of bats in North America, but only eleven distinct species may be found in Pennsylvania. At least three of these must be classed as quite rare.

It is pretty generally agreed that the body of the common bat reminds one of a mouse. But right here the

bat can draw the line and smugly deny kinship to any of the rodent clan. His is a separate order—*Chiroptera*—from the Greek words meaning "hand-winged." Furthermore, he isn't a newcomer to the Universe. Fossils satisfactorily indicate that Mr. Bat's structure has remained relatively unchanged during the past 60,000,000 years!

The bat's hind feet can barely pass as feet, while his front "feet" end in a hand-like arrangement made up of elongated "finger" bones complete with a partially free thumb. Leathery skin covers this ribbed framework on either side of the body, and thus the remarkably efficient wings are formed.

Bats do not alight on the ground if they can avoid it, for they crawl with pathetic difficulty. They cannot spring into the air from a flat surface, but must climb up a little in order to launch themselves on their flight. Once the bat is airborne he becomes a graceful, coordinated aerialist. Some are swifter than others; some excel in swooping, perfectly controlled maneuverability. A



good example of gymnastic prowess: the red bat. This narrow-winged fellow is capable of darting through the air with great speed—a real zig-zag show-off, and it would be impossible for any bird—even the swifts and nighthawks—to “tail” him in his dazzling flight.

The little brown bat is Pennsylvania's most common member of the flying mammal clan. It is smaller than its big brown cousin, but ears and tail are proportionately longer. S. Howard Williams, in his “Mammals of Pennsylvania,” tells of finding thousands of the squeaking little creatures hibernating in Bear Cave, Westmoreland county. There were “a few albinos among the slumbering throng. . . .”

The big brown bat is also common in the State. Its wingspread, about 12 inches, is three inches greater than that of the little brown bat. Making its appearance rather late in the evening it flies lower than the red bat and shows a definite preference for urban areas. It is supposed to be migratory, and this may hold true in the northern ranges, but in Pennsylvania it usually hibernates. In mild weather it may venture forth and go abroad on short flights—an energetic habit not shared by the sound-sleeping little brown bat.

Most beautiful of our native bats is the red bat. Its color may vary

from bright reddish brown to a yellowish light red. Each shoulder is adorned by a white patch. It is approximately the same size as the big brown bat, and is the first to take wing in the evening. He may even start his “skysweeping” before sundown. The red bat may or may not migrate, all depending on how his instinct has sized up the approaching winter. More than any other bat, the red bat is the most solitary in its habits.

In certain swampy regions of the State, one can find the silver-haired bat. But it is not abundant. It also has a wingspan of about a foot, and is brownish-black in color. The dorsal surface is marked by a random sprinkling of white-tipped hairs, giving the upper part of the body a grayish tinge. It is most plentiful in the Pymatuning Swamp and in Mercer and Crawford counties. It has a habit—as do many bats—of skimming close to water surfaces, picking up floating insects or snatching a drink while on the wing.

The hoary bat is not common in Pennsylvania, but it has been observed in many counties. Its shape, especially the long narrow wings, resembles that of the red bat, but it is larger. Its color may vary from umber-brown to light yellowish brown. The hairs are usually tipped with white and the face peppered

**LITTLE BROWN BAT** is Pennsylvania's most common member of the flying mammal clan. It is smaller than its big brown cousin but ears and tail are proportionately longer.





U.S. Fish & Wildlife Service Photo

**BIG BROWN BAT** likes towns and people. You may even see him fluttering around street lamps at night in search of insects attracted to the light.

with short black hairs. The underside is white, but between the belly and the throat there is a band of light brown. As a rule, the hoary bat does not bother to seek out dark places during the day. Instead, it hangs itself up on a convenient twig. (The method of alighting in batdom is always right-side up, assisted by the "thumb" hooks and the hind feet. But as soon as he's sure of his anchor points he makes himself comfortably at home by turning head downward and hanging on with the curved nails of his hind feet, exhibiting no dignity in the process, but plenty of determination).

Say's bat and Leconte's little brown bat have a limited distribution in Pennsylvania. They are so similar to the little brown bat that they are often confused with that species. Say's bat has longer ears and prefers the lowlands—always in rural places. It has been reported from Somerset, Fayette, Greene, Allegheny, Cambria and Westmoreland counties. Leconte's bat has short ears and 18 teeth above and 20 below. The usual arrangement among bats is 18 teeth above,

14 below. But just to keep everything confused, some have 16 above and 18 below.

The New York pygmy bat, the Georgia pygmy bat, and the Indiana bat are rare in the State. At widely-spaced intervals the Georgia pygmy bat may up his population slightly in some sections. But the Indiana bat is so rare that only a few have been observed—two of these in Delaney's Cave, near Fairchance, Fayette county. The New York pygmy bat, always scarce even in his favorite western and northern habitats, are believed to range as far north as Minnesota. Several have been sighted in Beaver county. Like the Indiana bat and the Georgia pygmy, the New York pygmy bat has a body length of less than three and a half inches.

The evening or twilight bat qualifies as the State's most narrowly distributed bat. It is small, ranging in color from mouse-gray to red-brown. A southern species it is strictly gregarious and, strangely, is known almost exclusively in the vicinity of Waynesburg, Greene County!

Most bats are covered with an exceedingly fine, soft fur. With the wings fully spread, the size of the bat creates a deceptive weight illusion. But in reality—as an example—more than 20 adult little brown bats may be required to gross a weight of one pound! Yet, this diminutive little "squeaker" may live to be fifteen years old, during which time he consumes close to a hundred pounds of insects—indeed, his insect consumption for a single night has been known to equal more than half the weight of his body!

Like the owl, bats of our hemisphere have been endowed with perfectly noiseless wings. The rubbery muscle structure which powers the strange pinions looks delicate and inadequate. But deception rules here, too, for migrating bats can fly great distances, non-stop. And they can dart and gambol through the night sky for hours on end, flying with open



mouth which scoops up flying beetles, gnats, moths, midges, mosquitoes, etc. (Bats make a constant noise while in flight, rhythmic and too highly keyed for human ears to hear. More about this in a later paragraph).

Perhaps the best demonstration of big-energy-in-a-small-package is provided by mama bat as she carries her young (except when she decides to "hang" them up for practice dangles, they cling to her from birth until they are at least three weeks old) on nocturnal feeding flights. Neither her speed nor her aerial agility appear to be affected by the extra burden of her brood which, in case she has borne quadruplets, may exceed her own weight. And while she's flitting over broad expanses the young may be draining her milk supply, relentlessly forcing her to rebuild her strength with huge quantities of insects. In order not to be misleading, I believe that I should here point out that many female bats are equipped with but two nipples, and a few with only one. Others, like the red bat and the hoary bat, have four

nipples. Nature engineers things in such a way that a mother bat able to take care of four young frequently may bear less than four; but rarely does the female with but one nipple experience a multiple birth.

The physical make-up of all bats is vastly unlike that of any other mammal, either living or extinct. Science has found out, for instance, that all bats are totally color-blind. To them the world is either black or white, or both. But bats can see perfectly well in bright sunlight, so the ancient "blind as a bat" saying is wholly without foundation. They do prefer darkness, however, and light seems to make them uncomfortable . . . "particularly if they are made to stare at it wide-eyed." . . .

The bat's normal temperature—an amazing 104 degrees—becomes a truly phenomenal thing when we consider that it automatically adjusts downward when the creature hibernates. If the inside of a cave or other shelter has a temperature of 58 degrees above zero, the body temperature of the bat will very quickly approximate that

**BATS BY THE THOUSANDS** pour out of Carlsbad Caverns, New Mexico each night to destroy millions of harmful insects. Bats are never molested because of the good they do.

National Park Service Photo



reading. If the temperature happens to drop below thirty degrees above zero, the bat generally will die. The rate of breathing can be reduced down to eight or ten breaths per minute during hibernation, while normal respiration requires 200 breaths per minute!

If you have ever held a bat in your hands—and this can safely be done with the protection of thin leather gloves—you probably noticed that it trembled all over. This was not caused by fear, but was protection against abuse of a network of nerves so sensitive that your touch was in effect like that of a rasping file on a child's flesh. The little fellow's ears and the tip of its nose share this same sensitivity. One scientist reports that the bat's ears are so sensitive that when he fired an experimental shot near a flock, the concussion knocked almost every one of the hundreds of bats to the ground!

As far back as 1794 an Italian biologist became keenly aware of the fact that bats are equipped with a sixth sense. He blindfolded a number of bats and turned them loose in a roomful of dangling ropes. The bats wheeled about in the room, rarely touching any of the ropes. Today we know that bats have had their own radar system for millions of years!

Following a hunch that bats emit high-frequency sounds while in flight, scientists recently used a supersonic recorder to gain a revealing insight into the bat's secret methods of uncanny perception. It was learned that not only do the creatures release rapid bursts of almost constant sound pitched far above the hearing range of the human ear, but also that these sounds were bounced back to the bat's incredibly sensitive "radar" ears by anything that may be "focused" in its flight path. In other words the bat is both transmitter and receiver. It projects sounds into the air; instantaneous and *exact* pinpointing of

echo's origin then tells the bat what to do next—whether to swerve a little or a lot to the right or left, up or down. Some inner mechanism apparently computes with monotonous accuracy the distance to the object, whether it be fixed or moving. Some scientists believe the bat can use his "radar" device to single out things as small as a tiny insect—which he gobbles up after taking ultra-precision distance and location measurements on a pitch-black night. Science has already proved that bats cannot see in total darkness, so the little winged fellow with the whiz-bang high-gear metabolism isn't able to rely on his eyes to guide him to some juicy insect.

Science is a long way from completion of its study of the complex sending and receiving equipment which so marvelously directs the movements of Mr. Bat. Undoubtedly the awesome little surprise package will continue to astound and enlighten space-age men for some time to come. (Right now, the homing instincts of the bat, said to be more accurately attuned than those of any bird, are being carefully studied and reported on from time to time).

Among non-tropical bats, mating occurs in the fall. But, curiously, embryonic growth is completely arrested during hibernation and pregnancy does not actually begin until spring. It lasts about 90 days, and the young arrive in June or July. The mother goes through the ordeal hanging right-side up, so that the tiny youngsters will drop into a sack she fashions by curling her winged tail upward. She snips off the umbilical cord with her sharp teeth and allows the blind, naked infant to find its source of nourishment. In about nine days the baby bat opens its eyes. The mother bat will use buffeting wings and chattering teeth to fight for her young if need-be, but the male takes no interest in the young. He's usually in a new territory, sport



ing around the countryside when his offspring enters the world.

Down through the centuries few living things have been more thoroughly slandered and maligned than the bat. As a matter of tradition he's still associated with witches and black cats on Halloween. Folklore has long played shoddy and unfair tricks on him. And common, indeed, is the belief that bats carry bedbugs, but this is absurdly untrue. So is the claim that all bats eagerly await an opportunity to become entangled in some hapless woman's hair. They have no more inclination to bury themselves in feminine tresses than does a butterfly or a bluebird. Indeed, if such a stormy event should occur, the bat probably would be more terrified than the lady! The great William T. Hornaday once commented: "One cross old bumblebee is more dangerous to a peaceful community than all of the common bats of the countryside." . . .



Photo by Don Heintzelman

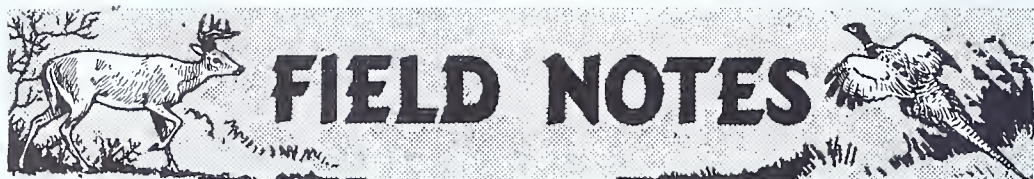
*National*

# FARM SAFETY WEEK

**JULY  
19-25**



**SAFETY MAKES SENSE**



### Friends In Need

**HUNTINGDON COUNTY**—April 9, while conversing with Harvey Secrest, a friend from the Licking Creek area of Mt. Union RD, I learned of another of the phenomenal friendships developed among nature's creatures. Mr. Secrest, a breeder of German shepards, had a covey of quail frequenting his property prior to the '58 hunting season. After the season only two females and one male bird remained. One evening during the daily exercise period the one dog discovered and gently brought to Mr. Secrest one of the female quail which had the right eye dislodged due to a shotgun pellet wound. An attempt was made to replace the eye but it failed. The eye was then removed and medication applied. Fearing the bird may succumb to starvation and exposure during the ensuing winter, it was placed in the chicken house to recover. A small door was left open and the following day the remaining

two birds accepted the chicken house as their home. One of the other occupants of the house, a large rooster, that adopted the quail as his brethren. All four birds roosted a night in the following manner. One female quail on one side of the rooster and one male and the other female on the other side. The rooster then extended his wings over the quail forming a canopy and more or less defying anyone to disturb his charge.—District Game Protector Richard Furry, Huntingdon.

### What's Up Doc?

**YORK COUNTY**—On April 3, I went with District Game Protector Kirkpatrick to North York to answer a rabbit damage complaint. The lady who had made the complaint showed us the damaged shrubbery and trees. After she had shown us the area, she stated she had a bush at the front of the house with some kind of damage but was unable to find out what kind. As we stood at the bush talking, I happened to glance down and there was the culprit who was doing her the damage. The lady of the house was very much amazed and a bit displeased too, discovering that the culprit was her 2-year-old son.—District Game Protector William A. Griffith, York.

### Hard Boiled Eggs

**CRAWFORD COUNTY**—While checking Wood Duck boxes on Spart Lake I discovered that one of the boxes contained three eggs from last year. They were as hard as baseballs but otherwise untouched. These eggs were apparently from a very late hatch last year.—District Game Protector John R. Miller, Titusville.

AND WHATTA YOU THINK  
YOU'RE DOING?







### Rock-A-Bye Baby

**ALLEGHENY COUNTY**—Mel Clear, Deputy Game Protector of Pittsburgh, has many damage complaints to take care of, particularly regarding squirrels and raccoon. One of his most unusual experiences in this respect happened last month. Upon receiving a call that squirrels were invading the privacy of a home, Mel was looking about on the second floor of the residence, when he noticed a movement in the mattress of the baby's crib. Mel probed the mattress with his hand, and hastily drew back this appendage with a mama squirrel hanging on his index finger. Three babies (squirrel) were also in the mattress. The locale? Why, Squirrel Hill, of course.—District Game Protector Samuel Weigel, Gibsonia.

### Old Hunters Never Die

**ADAMS COUNTY**—Hunting can be a strenuous sport, and also one to provide lots of healthful recreation and a "take it easy" sport. Mr. William Oyler, of Arendtsville, stopped by my headquarters to relate some of his experiences. Now 69 years of age, Mr. Oyler has recently retired after a life of fruit farming. He tells me that for most of his life he was too busy and had little opportunity to hunt. Since retiring, Mr. Oyler has become a "specialist" in the Woodchuck-hunting field. Using a Remington Mod. 722 in the .222 cal., equipped with a 6 power 'scope, Mr. Oyler last summer killed 174

woodchucks for his fellow farmers in his Adams County area. In enjoying his retirement to the fullest Mr. Oyler has hunted in Maine as well as in Pennsylvania for deer and bear and is leaving this week for a combination fishing and spring bear hunting trip to Canada. Retirement for this gentleman has meant, not the "Sitting out" of his remaining years, but an opportunity for the things for which he could never find time during a life time of hard work.—District Game Protector Paul Glenny, Gettysburg.

### He Who Laughs Last

**LEHIGH COUNTY**—Mr. Clayton Dengler, Trexlertown, who has been trapping fox for several years in Lehigh County, recently told me of an experience he had when attempting to dig out a red fox from its den. He and Mr. Paul Hausman dug 22 feet in order to get the red fox out of its den. They then put the fox in a burlap bag, after which they covered the hole which they had dug. When this was completed, they turned to pick up the fox in the bag and discovered the bag was empty! Mr. Fox had eaten a hole thru the bag and was enjoying his liberty.—District Game Protector William A. Moyer, Allentown.





### Look Ma—No Radar

**FULTON COUNTY**—Over a period of years I have picked up quite a few Loons and Grebes. Electric storms at night are their big hazard. Wet, black-top roads apparently look like streams in the lightning flashes. The grebe and Loon are aquatic marvels, but nearly helpless on land. Their legs are too far back on their bodies to permit them to walk, and neither can fly unless they take off from water.

A word of caution, if ever you have occasion to take a Loon to a body of water. He possesses a sharp strong bill that works well on land or water.  
—District Game Protector Carl Jarrett, McConnellsburg.

### Flat-footed Friends

**MERCER COUNTY**—During the last two weeks of April, I have observed five Mallard duck nests on a large farm pond and all of them had eggs laid in them, with one nest containing 13 eggs. These ducks are semi-domestic and I informed the owner of the pond that crows were frequenting the pond and he should make it a point to wipe out the crows because they would eventually find and rob the duck nests. A few weeks later the landowner informed me that the crows found the nests and destroyed four of them. Now, as the

ducks lay eggs the landowner fathered them and puts them under a setting Rhode Island Red clucker which he has penned. What an awful let-down it is going to be to this chicken when she hatches out the eggs and learns that all of her offspring have flat feet.  
—District Game Protector Arthur Biondi, Mercer.

### Biting the Hand That Fed Her

**BUCKS COUNTY**—Deputy Game Protector Dick VanSant of Levittown reported an actual incident which reveals a behavior characteristic not often associated with the timid backyard cottontail rabbit.

Last year Mrs. William Powell, of the Snow Ball Gate Section of Levittown, hand-raised an orphaned cottontail. The animal was subsequently released in her yard where it took up residence. It was induced to remain by regular feeding through late summer and winter months.

This spring, on April 15th, Mr. Powell attempted to feed it some lettuce from her fingers and was promptly bitten for her trouble. Thinking the rabbit preferred privacy, no further attempts at approaching it were made.

The final insult occurred when, a few days later, VanSant was called and requested to come right away because a rabbit was chasing some women around the backyard. When he arrived he was told that the animal had attacked Mrs. Powell and two small girls and had scratched them severely on the legs. During the tussle Mrs. Powell fell backward





over the children's swing and cut her leg before the trio could reach cover.

The rabbit was killed and analyzed for rabies; it was found to be perfectly healthy. However, a nest containing five young rabbits was found about 150 feet from the scene of the attack.

Could it be possible, remembering her own underprivileged youth, that she was trying to save her progeny from a life of eye droppers, ninny bottles, limp lettuce, bruised ribs, and the confines of an undersized cardboard box?—District Game Protector William J. Lockett, Doylestown.

### Song Leader

**NORTHEAST DIVISION**—For the past 5 years I have been an observer on a survey of woodcock on the spring singing grounds. My line runs from a point in Egypt Valley to Westbrook pond and has 9 stops. The birds usually start to sing about March 21st and continue to about April 30th. I can step out on the front lawn and hear 4 different birds performing within a 150 yard radius. No doubt many persons are familiar with the woodcock mating habits but for those who are not and are ardent woodcock hunters, it would sure amaze them to watch the flight of the male as he descends on one of these flights. One hunter remarked, "I never saw a woodcock fly like this."—Land Manager Albert J. Kriefski, Hawley.

### Alarm Clock

**SCHUYLKILL COUNTY**—On Sunday, April 12, 1959, at approximately 5:45 a.m. I was awakened by a loud rapping at my bedroom window. Thinking it was someone who had killed a deer on the highway and wanted me to get up, I looked out the bedroom window and found to my surprise a large male ringneck pheasant jumping up against the

window and pecking at his reflection. The pheasant did this every morning regularly at the same time. We used him for an alarm clock until Daylight Saving Time went into effect. Then the pheasant forgot to turn his clock ahead and was exactly one hour late.—District Game Protector F. Mason Spancake, Pine Grove.

### Better Rat Trap

**MERCER COUNTY**—The proprietor of a food store related this story to me and it proves that so-called predators are beneficial.

He was cutting meat one evening and heard quite a commotion and squealing in the store. He investigated and found a rat with a weasel in hot pursuit coming down the aisle and then disappeared under some boxes. The weasel would come out of hiding while he would be cutting meat and venture over to sniff at his feet and he in turn would throw a chunk of meat on the floor and the weasel would take it behind some boxes. This little fellow stayed around for about a week and then disappeared, so did the rat. This man claims that weasels are better than any rat poison or traps.—District Game Protector Arden Fichtner, Greenville.



# Why Hen Pheasants Are Protected in Pennsylvania

By Glenn L. Bowers

Chief, Division of Research

SOME hunters have indicated a desire for opening the season on hen pheasants. Various reasons have been advanced, most of which do not support or justify the position these sportsmen have taken.

Although in most hunting we shoot males and females there are good reasons to protect hen pheasants. The females and young of most other species are not subjected to the severe selective mortality common to pheasants during the breeding, nesting and brooding periods. Another extremely important fact is that the harvest of pheasants is the highest of any species—that is, a higher percentage of the pre-season population of cock pheasants is taken by hunters than any other species. Pheasants, living in open farming country, are easier hunted and killed than grouse in

woodlands. By way of contrast, rate of harvest of grouse would only a small fraction of the rate pheasants.

Bobwhite quail mate as pairs hence there is no advantage to selective shooting since a cock is required for each hen. But because one cock pheasant mates with a harem of many hens there is a distinct advantage to selective shooting to provide a maximum number of breeding hens and the production of a good crop of young birds.

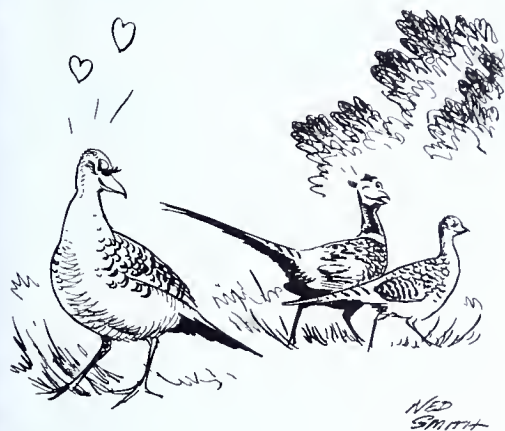
One fact often stated by those who would open the season on hens is that both sexes are taken on regular shooting grounds (shooting preserves). There is no valid comparison here, because natural reproduction receives no consideration in the shooting grounds operation. The shooting grounds operator depends upon cover he has developed to hold the birds he releases almost daily during the season.

Another argument advanced is that there is a tremendous waste of hens which are killed by mistake and allowed to rot in the fields. Apparently the advancing this argument would change the law because a few hunters violate it. Do we change traffic and speed laws because there are violations? There is very little reason for the accidental shooting of a hen pheasant, and a sportsman interested in the future of his sport will be careful in determining sex before he fires.

A few misinformed and misguided individuals believe that there is







more female chicks hatched than cocks. For the most part Nature brings forth, in all forms of life, about an equal number of both sexes. Pheasants are no exception. A check of hatches of thousands of birds indicates a sex ratio varying little from 50-50.

The statement has been made that many states permit both sexes to be taken. 'Many' is a relative classification—but at any rate is a misstatement in regard to legal open seasons on hen pheasants. Some states which have little or no natural wild production shoot hens. But these states are completely dependent upon released birds for their hunting. Other states tried hen shooting but either gave it up as populations dwindled or closely regulated the harvest by rather complicated tagging, or semi-controlled conditions. In areas where pheasants become extremely plentiful (and it is doubtful that this condition will ever exist in Pennsylvania) some hens could be shot. But in most years and in most areas we can use all the wild hens we can keep. Recently a mid-western state experimented with hen shooting in several counties. Compared to populations on areas of cocks-only hunting the population went down considerably the first year following the hen harvest. The second year there was a very marked reduction, and by the third year pheasants were scarce!

Some states can get by with fewer hen holdovers because conditions during nesting and brooding are far different from those in Pennsylvania. In some other states pheasants nest on the banks of drainage ditches and in other areas removed from the hazards of active agricultural operations. In our state most hens nest in hayfields and the young spend most of their early life in similar areas where they are vulnerable to farm machinery. Losses during the breeding, nesting and brooding period are much higher than most sportsmen realize. One third of the nesting hens may be killed by mowing or other farming operations, and nest destruction may reach 65% or more. Because there is little we can do to curtail this loss we should maintain as many breeding hens as possible to offset the serious drain.

Since most pheasant hunters know how difficult it is to find cockbirds after the first several days of the season they should realize the magnitude of the harvest. It is likely that hens would be harvested in like manner if they were legal. Can you guess how soon pheasants would be scarce if there were open seasons on hens?





# CONSERVATION NEWS



## Good Manners Open Posted Land

Bay State gunners can have immediate access to about 600,000 acres of posted land merely by respecting landowners and asking permission to hunt their properties, according to the Wildlife Management Institute. In Massachusetts and in many other States sportsmen are dependent principally on private lands for most hunting and fishing.

A study by Joseph S. Larson, with the Massachusetts Cooperative Wildlife Research Unit, shows that 59 per cent of the State's area can be hunted; four per cent being public land and 55 per cent open private land. No trespassing signs surround an area amounting to 20 per cent of the State. More than half of the posted land can be hunted and fished, if sportsmen ask for permission.



**PRIZE WINNERS** in the Good Outdoor Manners Contest conducted by the Pennsylvania Forestry Association were honored at the Association's annual banquet held in Altoona on May 22. These youngsters all submitted prize winning names for a raccoon which will be used to symbolize the educational program. Back row, left to right: Carolyn Exton, 5th place; Kenneth Dawe, 4th place; Marjorie Gey, Honorable Mention; Karen Bowman, 3rd place; Fred Klunk, Honorable Mention; Ed Mastrean, 3rd place. Front Row: Stephen Sabulsky, 2nd place; Doris Eckard, Honorable Mention; Byron Leiby, 5th place; Lloyd Partain, President, Pennsylvania Forestry Association; John Hoyes, 1st place; Maurice K. Goddard, Secretary of Forests and Waters; A. C. McIntyre, Contest Director.



## How Many Coos Make A Mourning?

Between May 20 and June 10 field officers of the Game Commission combined with U. S. Fish and Wildlife Service agents in conducting what is known as the mourning dove call-count survey. U. S. Game Management Agent Samuel T. Miller describes this as a precision study. It must be started 30 minutes before sunrise. In areas where doves are known to be living, routes of 20 miles each are set up and the observer must stop each mile and listen for a period of three minutes. He must count each dove call that he hears and record any doves that he sees during the entire tour which takes about two hours. He must drive at approximately 25 miles per hour so that a mile section is covered in about three minutes, thus making the periods of listening and driving about equal.

The call count is not intended to be a total tally of the mourning doves in any one area, but the information gathered is used in conjunction with nesting and brood surveys and the number of birds reported killed during the hunting season. This count is one of the factors that influence the setting of the hunting seasons and the number of birds permitted to be killed, says Miller. Surveys like this help to keep the harvesting of the dove crop within safe bounds.

Game Management Agent Miller explained that this is only one of the many ways that the state and federal authorities cooperate to afford better management of migratory birds and the end result—good hunting.



## Sauer Named New Comptroller For Pennsylvania Game Commission



PAUL J. SAUER

Paul J. Sauer, of Lancaster, has been named comptroller for the Pennsylvania Game Commission, succeeding Joseph J. Micco who recently was appointed comptroller for the Pennsylvania Department of Highways. Mr. Sauer also serves in the same capacity for the Pennsylvania Fish Commission.

A graduate of St. Joseph's Business School in Lancaster, he started his state service as an account clerk in the Pennsylvania Liquor Control Board on November 12, 1935. On April 1, 1955 he was loaned to the Governor's Office of Administration as an assistant general control accountant and on October 1, 1955 became assistant comptroller of the Pennsylvania Fish Commission.

Mr. Sauer is a past president of the Lancaster County Union of Holy Name Societies, founder of the Catholic Forum of the Lancaster Deanery and chairman of its executive committee for five years.

## Hunter Casualties in 1958 Followed Usual Pattern

The number of persons who shot themselves or others last year while hunting wildlife in Pennsylvania (480) was fewer by 23 than in 1957. But of that total the number of fatalities (27—all by firearms) was 4 higher than the average of 23 for the previous ten years. "You can't guess 'em," say wildlife people of long experience, after a year during which, for no apparent cause, the figure rises or falls markedly. The pendulum swings to one side this year, to the other the next. In 1947, for example, the fatalities by sporting arms during hunting use were 14, or 9 below the recent-year average. In 1956 the total was 30, in 1955 it was 19.

There is little doubt, say persons who have studied the facts surrounding hunter shooting incidents, that common sense, self-control and respect for the potentials of the instrument used would prevent most of the self-shootings and the injury or death of others in the hunting field.

The description of events leading to loss of life through accident, whether in the home, the factory, on the farm or wherever, usually arouses only morbid interest. However the following data on the 1958 fatalities only is presented in the hope it may prevent similar incidents in future: *12 of the hunter shootings last year were self-inflicted.* Of the hunters who shot others, 2 were 12 to 16 years old, 2 were 16 to 21 and 11 fell in the 21-and-over age class.

Eight of the fatalities occurred while deer hunting. There was none in bear season. The remainder were listed as: 14 in small game season, 4 while hunting woodchucks and one while shooting blackbirds.

Noting the causes of the 1958 hunter fatalities only: two died because guns were placed in dangerous positions; 7 because a gun accidentally discharged while held by

hunters; 2 of ricochet or stray bullets; 6 "did not see the victim in line of fire;" 5 resulted "when hunter slipped and fell with gun safety off;" 2 when firearms were dropped while hunting; 2 because humans appeared the shooters said, to be the bird or animal sought; and one resulted from a gun used to club brush.

Nine of the fatalities occurred in open fields; 3 in brush; 5 in open woodland; 3 in dense woodland; 1 at a camp; and 6 on woods roads or public highways. Six occurred at times when light conditions did not favor good vision—one of these in darkness, 2 at dusk, 1 at a time when snow was falling and 2 while it was raining.

The shotgun accounted for 14 of the fatalities, the rifle 13.

There is no 1958 record of an archer injuring or killing another hunter in Pennsylvania by an arrow loosed from his bow.

The high percentage of persons shot while hunting in Pennsylvania last year were of mature age. So the problem largely remains to instill caution with firearms, always, and to impress on all hunters the need for emotional control while in pursuit of wildlife. The foolish, the unfortunate, the careless and those who become unduly excited or have optical illusions while hunting will always be with us. One of the best solutions to the problem in future is to teach the younger generation safe, sensible gun handling and stress to newcomers to the sport the need and the value of a cool head, also definite identification of any wild target before firing.

However, all but a comparatively few hunters last year used good judgment and enjoyed their sport in safety. Most of them took precautions to avoid freak or foolish accidents, and most dressed in a way to look like anything but wildlife



## Springtime Pheasant Losses Hurt Fall Hunt

Wild and domestic predators and farm machines are responsible for the loss of a large number of ring-neck pheasants. But indirectly the automobile may exact an even greater toll of the birds by killing many thousands of breeding stock individuals during the spring and early summer months. Persons who travel high speed roads in pheasant country see many dead ringnecks on highways at this time of year. Each hen lying there represents a potential early brood of 10 or 12 chicks, about half of them male birds. If she has a clutch of eggs or brood of tiny chicks they may as well be written

off as a total loss. If the hen escapes when a pheasant nest is destroyed through a mowing operation she will re-nest.

Game Protectors in pheasant territory have made numerous reports telling of the exceptional ringneck kill this spring. These two are quite typical:

Alfred Graver, Bucks County: "During April I counted no less than 69 hen pheasants dead on the highway in my district. Four of them were killed within the space of one mile. This should open the eyes of the public to the need for 'highway conservation.'"

William Shaver, Montgomery County: "It has been disheartening, in recent weeks, to note the large number of hen pheasants killed on roads in my district. The loss this year was greater than that in any similar period in several years. In most cases, if the motorist had given the ringneck ahead a little brake and a little horn the bird would have escaped."

The only other small game to suffer severely from highway vehicles is the rabbit. Here again brood stock is lost, but the prolific cottontail has often reared two families by early summer, and they are by then "on their own."

The wildlife loss caused by vehicles on high-speed roads will continue to concern wildlife managers and hunters. But often the decision whether a pheasant, rabbit or other wild creature will continue to live rests with the motorist. He needs only slow down or change course slightly, when it is safe to do so, to prevent the death of many a valuable small game bird or animal.

SAFE HUNTER BADGE was presented to Donald Kauffman by District Game Protector John M. Haverstick, of Lancaster, following successful completion of a Hunter Safety Course last fall. The course was conducted by the Optimist Club of Columbia, Pa. as part of their program of "Helping the Boy." An indoor rifle range and classrooms of the local Marine Reserve Training Center and the outdoor facilities of the Columbia Fish and Game Association's Sportsfarm were made available for the instruction.



## Annual Spring Survey Indicates Light Winter Kill In Deer Herd

There was some apprehension that the severe weather of last winter, which began exceptionally early, might cause a considerable loss of deer in Pennsylvania. Actually white-tail deaths from lack of nourishing food in combination with extreme cold during the late 1958 and early 1959 months, was less than the average of recent years.

A late winter and spring survey by Game Protectors using every available means to obtain the desired information revealed that the deer loss due to malnutrition, last winter, totaled approximately 700 of the animals. The healthy 1958 harvest of deer, plus the Game Commission's extensive browse cutting program, undoubtedly helped hold the figure down.

The worst hit section was the heavily forested northcentral area—in Cameron, Elk and Potter Counties, but Warren also reported mortality greater than most other northern counties. In the high percentage of cases the deer that failed to "make it" to spring were fawns of 1958. It was the old story: small deer that could not reach the not-too-available browse as high as could mature deer during periods the animals were unable to dig through to acorns, beech-nuts and other mast, which were plentiful but inaccessible through ice or deep snow.

The 1958-59 winter arrived early and brought long-lying deep snows and layers of ice. If there is a better time for sparse rations, when nuts and other foods on the ground are not available to deer, it is at the beginning of winter when the animals have stored-up fat on which to draw. Fortunately the weather moderated in January, baring some of the abundant mast. Also late winter storms, which take a toll of deer when the animals' resistance was at low ebb, did not materialize this year.

## Commission Completes Spring Program For Release and Raising of Game Birds

The Game Commission has completed its early-year liberations of game birds in Pennsylvania. The following totals are in round figures.

Distribution of 2,700 wild turkey, one gobbler to 3 hens, began in January. Releases in some northern counties were delayed because of severe weather conditions. Following experimentation the plan this year was to liberate the turkeys earlier than formerly so that they could become better acclimated to conditions in the wild prior to the breeding season.

Ringneck pheasants totaling 40,000—slightly more hens than cocks—were distributed from the State Game Farms during the months of February and March. Again the purpose was to allow time for the birds to become accustomed to life in the open, following which they will produce better.

During April 2,700 bobwhite quail from the Commission's Eastern Game Farm were released, all of them in the Southern counties of the Commonwealth. These birds were almost evenly paired.

Applications for 230,645 day-old pheasant chicks have been received. It is anticipated all requests will be filled. (Last year 224,474 chicks were provided under the pheasant rearing program.) They went to farmers whose land is open to public hunting, Farm Game Project Cooperator and sportsmen's organizations who met the requirements.

The final date for pheasant chick applications was April 1. No more pheasant chicks will be available this year.







## OUTDOOR FUN WITH A FUTURE



# Water and Wildlife

By Ted S. Pettit

**A**LL animals need water in one form or another to survive. Some need just enough so that their life processes may be carried out. Others live in water for all or part of their lives. Several kinds of our most interesting and important game or fur animals are dependent upon water and will not be found where there is no water. One of the biggest problems facing conservationists today is that of adequate water supplies in the right place, in the right quantity at the right time for man's many needs and for wildlife.

But any conservationist, before he is able to manage water resources for wildlife must know a few fundamentals about water in general, and a few relationships that exist between water, plant life and animal. July is a good time to explore some of the waterways of Pennsylvania, and see for yourself how aquatic animals live and how soil, water, plants and animals are interrelated in several ways, one to the other.

### Water as Wildlife Communities

Life on earth began in the sea many millions of years ago and still today, most living things live in the water. From animals so small you need a microscope to see them, to 30 pound carp or catfish, there are many forms of animal life in the rivers,

lakes and ponds of Pennsylvania. Just as land animals depend upon plant life, so do those varieties that live in the oceans, bays, rivers, streams, lakes and ponds.

### How Lakes And Ponds Are Formed

There are several ways in which lakes or ponds have been formed. One results from a shift in the earth's crust, so that a depression is formed that fills with water. Volcanoes have created lakes in some places. When the volcano becomes extinct its crater may fill with water to form a deep, round lake.

Glaciers have been responsible for many lakes. As the glaciers move they gouge out holes in the earth that fill with water, or when they stop moving they may deposit the soil and rocks they carry and dam up a valley to form a lake.

Lakes may also be formed by geologic processes that result in land being lifted in such a way that it dams a river or blocks off an arm of the sea. Silt washing downstream or landslides from mountains may dam streams or rivers and form a lake.

Another way that lakes have been formed is through the breakdown of rock materials under the surface of the earth, creating a hole that then fills with water.

Beavers are noted for their pond

building activities, and man has created millions of acres of water by building large dams or farm ponds.

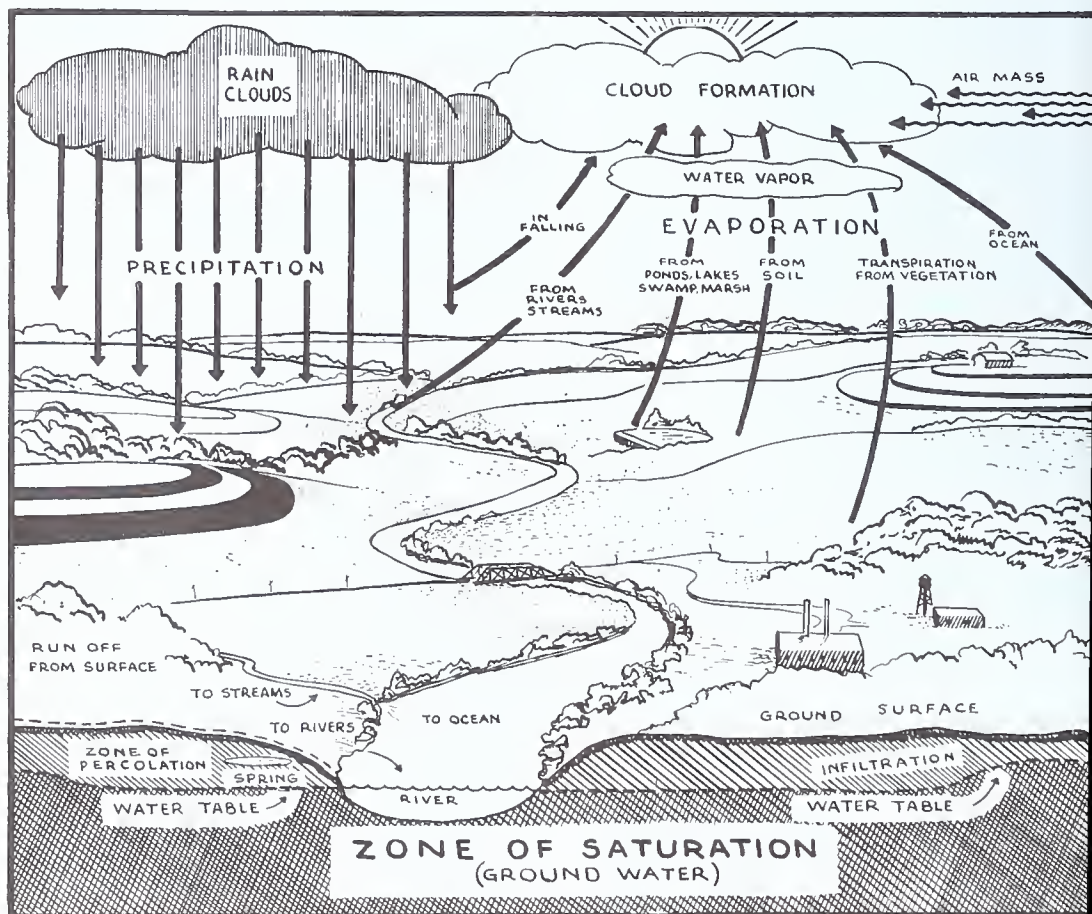
### How Streams and Rivers Are Formed

Lakes and ponds are still waters. They may be fed by a stream and feed a stream or river. But the movement of water is very slow, if there is movement at all. Streams and rivers on the other hand are fast moving or slow, but ever moving usually toward the sea. They were created by the concentration of water cutting down into land that has been pushed upward from the earth's surface by forces from inside the earth. How fast the water moves—whether it is a bounding white-water mountain stream, or slow meandering river depends upon the slope down which it runs. The amount of water in streams and rivers and the speed with which they flow may change with the seasons. Spring rains and melting snows

frequently fill streams and rivers to overflowing. In late summer the water level may be much lower.

A fast-moving stream, carrying rock particles and rocks themselves, and water action itself, wears down the stream bed and the surrounding hills. Thus a young valley may be shaped like a V. As water runs through it for years and years it gradually becomes the shape of a U. This does two things: First, it carries silt and rock particles into the river, which make the river shallower and slower moving. At the same time, this action levels out the stream and cuts down the slope down which it runs, and thus slows down the speed of flow of the stream water.

Water running off mountain or hillside into streams carries salts and minerals from the soil and from rocks. Flowing streams themselves dissolve certain minerals from rocks and carry them into rivers and then to the





sea. This process, scientists believe, is responsible for salt water. Over many millions of years, salts and other minerals from the mountains and plains have been washed into the seas, a little at a time. As the water evaporates, a concentration of minerals in the sea has resulted in salt water. In addition to oceans, there are inland lakes which have no outlet and where the water evaporated, causing a concentration of minerals. In these salt lakes few animals can survive compared with fresh water.

Many things influence life in water. The temperature, amount of water, fertility of the water, the speed with which it moves, how clear the water is, the depth, all help determine which plants will live in a stream or river, lake or pond. In turn the plant life will help influence the animal life that lives there.

### Plant Life In Water

Soil and climate help to determine what kinds of plants grow in a river, ocean, lake or pond. But in addition, there is one more thing that is important—the water itself.

The amount of water and the rise and fall of the water level; the depth and clearness; the temperature range over a year or more; the length of time each year when growth conditions are suitable; the speed with which the water moves; the kind of rock or soil underneath; the minerals dissolved in the water; whether it is fresh; salt or a combination of the two—all these affect plant life in a body of water.

Plants that grow in water, like those that grow on dry land, need light so that they can manufacture food. Some water plants grow under water and never emerge above the surface. Others grow in shallower places and their leaves may extend above water. Still others are free floating—they have no roots that require anchorage in the soil. But all of them need light to grow.

As on dry land, all these plants

help to build up soil on the bottom, and create conditions for other plants to grow. Just as with plants on dry land, water plants too are the base of the food chain of animals from microscopic protozoa to five pound bass or forty pound muskellunge.

The temperature range is important to plant life in the water. Water that is cold or covered with ice for part of the year will not have the plant life that is found in a warm southern lake. Low temperatures slow up plant growth, and sunlight cannot penetrate snow covered ice. Plants in cold water remain inactive for part of the year, while in warmer waters they may grow all year round.

Movement of water influences plant growth too. Plants such as water lilies or pickerel weed, with their long stems, cannot grow in fast moving streams. The fast water would break them off. But in fast streams will be found ribbon-like plants with flexible stems and leaves that live near the bottom, or flat growing mosses and algae that can live in fast waters.

Mud bottoms, rocky bottoms, sandy bottoms or hard clay bottoms may have different kinds of plants growing on them, or no plants at all. In each case, the kind of plants and the number of them will have an effect on the animal life in the water.

Salt water—oceans, bays or tidal creeks, will have distinctive plant life associated with it. Those of us who live near salt water know the "sea weeds"—sea lettuce, kelp, gulf-weed, rock weed or bladder wrack. Some of these plants grow in warmer water than others. Some grow on sandy bottoms, others on muddy bottoms. Some grow from the low tide line to deep water, while others grow only in shallow water. Just as in fresh water, temperature, light, the movement of the water, and the kind of bottom (soil) help determine which plants will grow in salt water.

But conditions may vary widely in



one small water area, so that while we consider water as a total natural community, there may be several smaller communities within the large one. In a mountain stream, for example, there frequently are stretches of shallow rapids, followed by a deeper pool where the water is slow moving. In a river there may be broad shallow areas where silt has been deposited, followed by a narrow section of deep, fast moving water. In a lake or pond, the water along the edge may be shallow, warm and suitable for plant growth. Only a few feet away, the bottom may drop off to deep cold water, with few if any plants.

Different kinds of plants and animals will live in each of these smaller communities, depending upon their individual needs and requirements. Some aquatic animals need a combination of these smaller communities.

Trout, for example, live in fast-moving, cold, clear streams. They

thrive where there is a combination of rapids and deep pools and where there are gravel or sand banks in slow-moving water. They lay their eggs in the gravel; they find the food they need in the rapids or at the beginning or end of the rapids; they rest and find shelter in the deep, cool clear pools.

Temperature changes in water have a tremendous effect on the animal life that lives there. This is because most of the animals that live in water are "cold blooded." The body temperature is very close to that of their environment. Birds and mammals are "warm blooded." The body temperatures remain the same regardless of the temperature of the environment then surrounding them.

When the temperature of the water is too low, many animals slow down their life processes and hibernate. They remain relatively inactive until the temperature increases to the point where it meets the needs of the animal. In salt water, many fish migrate



as do birds. They move northward as the water becomes warmer in spring, and southward as it cools off in fall and winter. Warm water also has an effect on aquatic life.

Aquatic animals need oxygen for life just as do land animals. They get it from the air that is dissolved in the water, as we get it from the air in our atmosphere.

In fresh water, animals find the temperature range they require and the oxygen by moving to different levels of the lake. Under certain conditions water in a lake will form three general layers, the top layer being the warmest and the bottom the coldest. The in-between layer, called the "thermocline," usually has the necessary temperature and oxygen combination for fish.

This layering occurs in summer in lakes of certain depths. In lakes where this does not happen because the water is not deep enough, and therefore is the same temperature all the way down, only those animals that can withstand the highest summer temperatures will survive and live in the lake.

Water ways as natural communities of plants and animals are tremendously interesting to explore. There are a larger variety of life and more animals to be found than in any other natural area. Mammals from shrews to otters; birds from sandpipers to egrets; reptiles and amphibians from salamanders and snakes to turtles; fish of all kinds; snails, clams, crayfish; insects and lower forms of life all live in water in a web of nature. While these animals are interesting in themselves, the important thing to know is how they live in relation to others and to their environment.

### Animal Populations In A Lake

Bodies of water—lakes, ponds, streams or rivers—in much the same way as areas of dry land, vary in their ability to support animal life. In waterways too, there is a food

chain that starts with plant life and animal numbers grow smaller as they go up the scale from the lower plant eaters to the meat eaters.

The abundance of plant life in a lake depends upon the fertility of the water, on the temperature and other factors. Some waters are much more fertile than others and other things are more suitable for plant growth. Some lakes have a greater carrying capacity for plant and animal life than others, as do areas of dry land.

The chief difference is that fish keep growing as long as they live if there is an adequate food supply. Birds of the same species and mammals are all about the same size at maturity in a given area. But in a lake a sunfish may be three inches long when five years old or it may be twelve inches long.

This means that the carrying capacity of a body of water may be more accurately measured than an area of dry land. Biologists know, for example, that a one acre pond in some parts of the country may produce two hundred pounds of fish in a year. That quantity of fish may be removed every year from the lake as long as the things that make up "carrying capacity" remain the same.

It also means that this quantity may be made up of many thousands of small fish or fewer large ones.

Plant life then, is the base of a natural community where plants and animals live together interdependently. Within any natural community there are forces in action that control animal populations, including the animals themselves.

### Succession In A Lake

Many forest areas now grow where once there was a lake, beaver-dam or other pond.

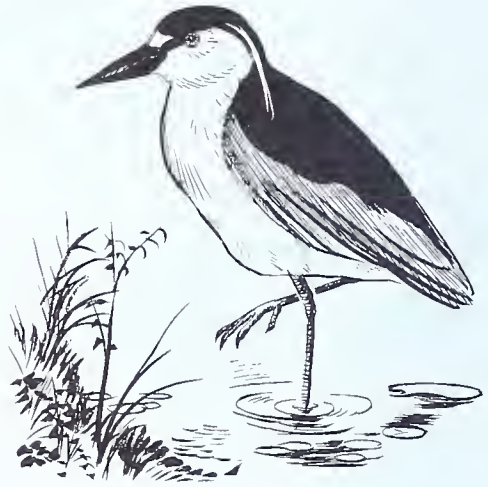
In the beginning there is only water and a rocky bottom. In the water live microscopic plants and animals that are free floating. Around the edge are other plants. Over many,

many years these plants live and die and their remains build up a layer on the bottom in which other plants can grow. These plants too, live and die and add to that layer of newly formed soil. In the meantime, soil from the surrounding area may wash into the lake and help build up the bottom.

Finally, around the edges in shallower areas, this soil replaces the water and builds up to the surface. Now other plants may grow—plants such as sedges, bulrushes or cattails, that as they grow, form a mat over what was once water. As they grow and die they too help build up the soil, so that other plants may grow, plants that could not grow before because of too much moisture.

Next, plants such as grasses and sedges will grow and these plants form sod and more solid soil. They will gradually move out toward the middle of the lake or pond as conditions become suitable for their growth.

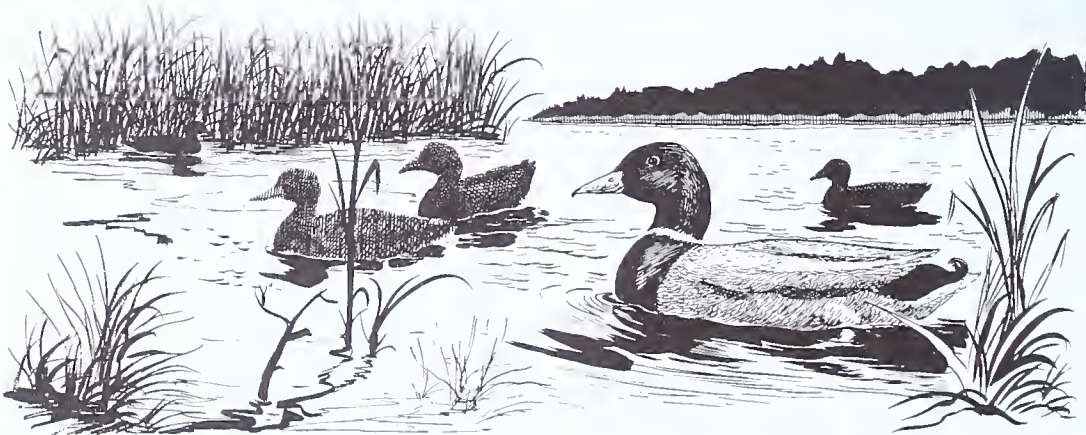
Now, if this pond is in an area where the climax community is a hardwood forest, swamp shrubs such as willow may move in next and grow with the grasses and sedges and finally replace them. Trees such as red maple, ash or elm will grow and shade out the grasses. These trees also will move out over what was once the lake as conditions are created suited to their needs.



Finally, a climax forest will replace these swamp shrubs and trees, sometimes with an in between stage, sometimes not.

As this succession takes place, it has a dramatic effect on animal life in the lake. In the beginning, this lake may have supported fish that can live only in cold water. Osprey or eagles may have found food there. On the bottom lived clams and mussels. In the shallower, warmer different kinds of fish may have lived.

As the bottom filled in and water became shallower, it also became warmer. More insects could live in the submerged plants. These insects supply food for sunfish or crappies. Bass would be found there since the





other fish and the insects supply them with food.

Ducks such as mallards might nest along the edge since they too, would find a supply of food in the plants that grow close to the surface.

As the cattails, bulrushes and reeds grow out from shore, the water has been replaced. Now birds that nest in such an environment move in—red-winged blackbirds, coots, rails and ducks. Muskrats will find food and cover and mink will be at home here.

The area of open water gets smaller, shallower and warmer. Fish life changes to those that can live in

the new environment. Around the edges now is a sedge-meadow where mice can live along with bobolinks, marsh hawks and short-eared owls.

Finally, as forest takes over the animal life is the same as in any prairie or forest climax. The animals found are those that live or feed on dry land. The ducks, muskrats, fish, turtles and other aquatic life are gone.

This is a natural process. It is going on all the time, faster in some lakes than others, but happening nevertheless. In some places it is being speeded up by man's use of the land.

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## THE BOOK OF SMALL MAMMALS

Just published, this beautifully illustrated book devotes a number of pages to mammals not ordinarily covered in popular animal books such as moles, shrews, gophers, lemmings and mice, as well as the popular furbearers and small game species. It offers a fresh approach to the study of mammals, going into such phases as identifying animal tracks and the preparation of plaster casts, plus the relationships between man and wild animals. In addition to facts about many species of wild animals, the book contains short chapters on how to live-trap them, how to build feeding stations, how to make artificial homes for some. Written by Ted S. Pettit, Conservation Director of the Boy Scouts of America, and illustrated in both color and black and white by G. Don Ray, the book is priced at \$2.95 and was published by Doubleday and Co., Inc., 575 Madison Avenue, New York 22, N. Y.

## THE CHALLENGE OF OUTDOOR RECREATION

Outdoor recreation in this country has changed from a luxury for a few to a necessity of the many. This was the studied opinion expressed by Laurance S. Rockefeller, Chairman of the new Outdoor Recreation Resources Review Commission, at the recent North American Wildlife Conference.

The Commission was established last year by the 85th Congress. All members of the Commission, which by law has a three-year life, were appointed by the President. Rockefeller said it was created because "the Congress and the President recognized that conservation, for the physical, cultural and spiritual benefit of the American people, is in a critical period of transition as a result of new demands."

He said that this country, despite being in the forefront in establishing a national and state park system, was "on the whole just beginning to wake up to the vital importance of recreation. Unfortunately, recreation is still considered by many, including policy-makers, with suspicion—as a waste of time."



Photo by Leonard Lee Rue

# What Do You Know About Birds?

By Carsten Ahrens

**B**IRDS are truly unique. They are the only animals with feathers. They are all egg layers, and their eggs differ from all others in having brittle, often highly colored shells. They are the only animals (other than himself) that man thinks can make agreeable sounds. Their blood temperature is much higher than man's 98.6. Their feet, beaks, and wings are perfected adapted to amazingly different living conditions.

Check your answers on this bird quiz with the answers below.

1. What bird is easily induced to inhabit a man-made bird house?  
A. Barn Swallow. B. Jenny Wren. C. Cowbird. D. Catbird. E. Meadow Lark.
2. What bird's eggs are plain white?  
A. Robin. B. Sparrow. C. Wild Dove. D. Killdeer. E. Spotted Sandpiper.
3. What bird's eggs are blue-green?  
A. Hermit Thrush. B. Downy Woodpecker. C. Ruffed Grouse. D. Common Tern. E. Purple Martin.
4. What bird's eggs are speckled?  
A. Wild Duck. B. Flicker. C. Bronzed Grackle. D. Robin. E. Bob White.
5. What bird lays two eggs?  
A. English Sparrow. B. Starling. C. Pheasants. D. Mourning Dove. E. Black Billed Cuckoo.



6. What bird lays a dozen eggs or more?  
A. Woodpeckers. B. Warblers. C. Quail. D. Flycatcher. E. Winter Wren.
7. What bird often selects the rafters of an old barn for its nest?  
A. Osprey. B. Meadowlark. C. Rail. D. Coot. E. Swallow.
8. What bird is splashed with the greatest number of colors?  
A. Painted Bunting. B. Scarlet Tanager. C. Red Headed Woodpecker. D. Golden Pheasant. E. Mallard Duck.
9. What bird feeds chiefly on insects?  
A. Bluebird. B. Kingbird. C. Osprey. D. Goldfinch. E. Cardinal.
10. What bird feeds chiefly on seeds?  
A. Grossbeak. B. Swift. C. Roadrunner. D. Crow. E. Summer Warbler.
11. What bird is chiefly flesh eating?  
A. Parrot. B. Whippoorwill. C. Night Hawk. D. Northern Shrike. E. Greater Yellow Legs.
12. Which bird does not migrate?  
A. Arctic Tern. B. Robin. C. Ringneck Pheasant. D. Bobolink. E. Yellow Breasted Chat.
13. Which bird migrates farthest?  
A. Chickadee. B. Titmouse. C. Downy Woodpecker. D. Golden Plover. E. Junco.
14. Which bird's name is repeated in its song?  
A. Wilson's Warbler. B. Song Sparrow. C. Catbird. D. Cowbird. E. Wood Pewee.
15. Which bird's nest is most intricately constructed?  
A. Yellow Billed Cuckoo. B. Baltimore Oriole. C. Common Dove. D. Night Hawk. E. Herring Gull.

Photo by Don Heintzelman



16. Which bird's nest is most simply constructed?  
A. Hummingbird. B. Marsh Wren. C. English Sparrow. D. Magpie. E. Barn Owl.
17. Which bird's nest is built on the ground?  
A. Killdeer. B. Wood Duck. C. Flicker. D. Red Wing Blackbird. E. Kingfisher.
18. Which bird's nest is underground?  
A. White Eyed Vireo. B. Petril. C. Cape May Warbler. D. Hairy Woodpecker. E. Cedar Waxwing.
19. Which bird eats on the wing?  
A. Alder Flycatcher. B. Blue Bird. C. Red Breasted Nuthatch. D. Blue Jay. E. Tree Swallow.
20. Which bird returns to its favorite perch to eat its food?  
A. Redstart. B. Olive Sided Flycatcher. C. Veery. D. Bank Swallow. E. Swamp Sparrow.
21. Which bird can drink without raising its head?  
A. Black Billed Cuckoo. B. Black Duck. C. Cooper's Hawk. D. Pigeon. E. Purple Grackle.
22. Which bird likes a snake's skin to decorate its nest?  
A. Pelican. B. Duck Hawk. C. Crested Flycatcher. D. Roadrunner. E. Blue Heron.
23. Which is the only bird that can fly backward?  
A. Duck Hawk. B. Turnstone. C. Whooping Crane. D. Humming Bird. E. Albatross.
24. What bird is a great mimic?  
A. Goose. B. Cowbird. C. Brown Thrasher. D. Wood Thrush. E. Least Flycatcher.
25. Which is thought to be the most intelligent of birds?  
A. Barred Owl. B. Crow. C. Parrot. D. Stork. E. Vulture.



Photo by Maskowski &amp; Goodpaste

## ANSWERS

- |       |       |
|-------|-------|
| 1. B  | 13. D |
| 2. C  | 14. E |
| 3. A  | 15. B |
| 4. C  | 16. E |
| 5. D  | 17. A |
| 6. C  | 18. B |
| 7. E  | 19. E |
| 8. D  | 20. B |
| 9. B  | 21. D |
| 10. A | 22. C |
| 11. D | 23. D |
| 12. C | 24. C |
|       | 25. B |





# The Ultimate In Accuracy

By Jim Varner

**T**HIS subject is not only a broad one but can become somewhat technical. We will try to avoid technicalities and stick to the more easily understood simple facts that all can get some good out of. In one article this subject can only be briefly covered. Future articles at various times will continue the discussion as we seek the ultimate for each individual purpose whether it is precision 22 Cal. match shooting or the advanced stages of handloading for the maximum accuracy in bench rest shooting. To the rifleman and hand-gun expert as well as the beginner this search for accuracy goes on indefinitely. In other words we will not try to tell you which is the most accurate rifle and cartridge combination in the world today as that would certainly be impossible. What we will dwell upon is how can we aid you

with your own particular firearm problem to get the best accuracy out of it. The man who takes his shooting seriously is interested in how well he can get his rifled tube to perform—how small the area he can get his five or ten shot groups into consistently at a given range. Slam-bang guess work calculations do not interest the real shooter. False claims of the inexperienced, boasting and hearsay goes into one ear and out the other. Perhaps a run-down briefly on the history of the search for accuracy in projectiles is in order.

Ever since man developed enough intelligence to heave a stone to protect himself, there has been a gradual increase in the desire to throw a missile farther, harder and more accurately. We will not dwell on this dim record of the past as there was little improvement even up to the time David picked up a few round pebbles and proceeded to let one fly with such force and dexterity from his simple sling-shot it pierced the thick skull of Goliath. As far as we know Goliath and his warriors depended upon shields and swords.



They didn't seem to possess a very modern ordnance department and gave no consideration to missiles. No doubt there was no singing, "There will be a hot time in the old town tonite" in the Phillistine camp after this episode. Perhaps the event, while not recorded, marked a new era in warfare. We do know the bow and arrow changed the picture for a long period and the first crude firearms added their awesome aspect to arguments both personal and 'en-masse'.

With the rapid trend today in the development of speed and accuracy in firearms and missiles of all sorts, it is difficult to realize that more radical changes and improvements have been made since the year 1900 than in all of the centuries preceding that date. For over four centuries the most used firearms were smooth-bore propelling round balls or shot. Despite the fact the Tennessee and Kentucky back woodsmen took such a toll of life at the battle of New Orleans with their old squirrel rifles, our Ordnance Department used the 69 and 72 caliber crude muskets of smooth bore vintage up until the Civil War.

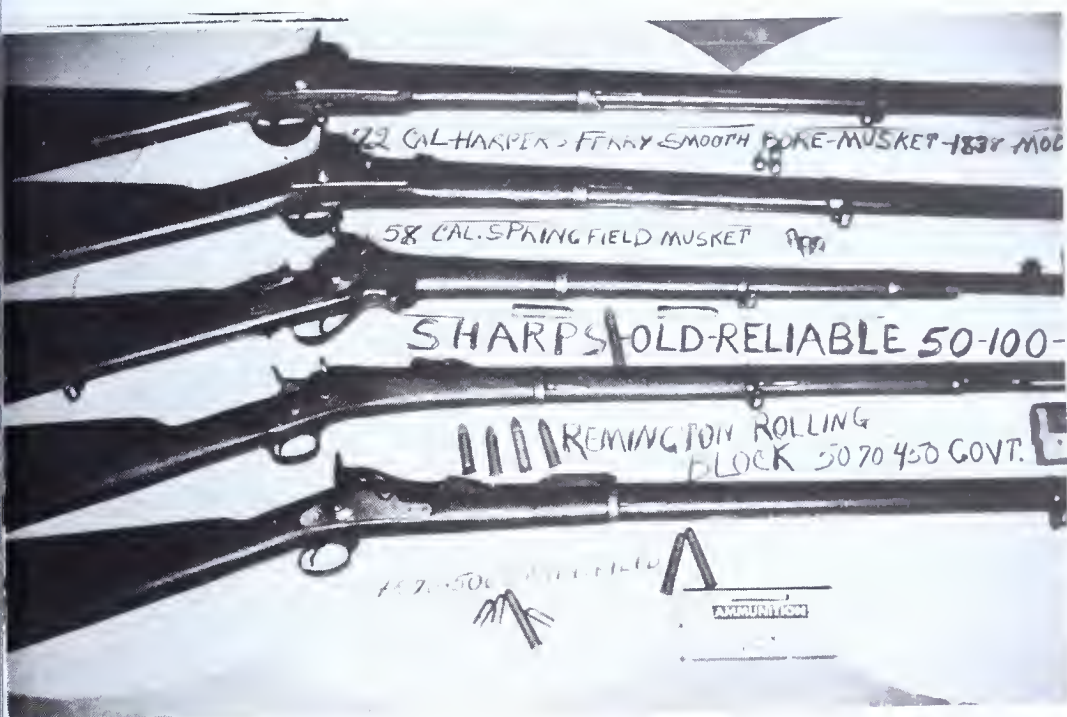
We all know the round ball projectile is ballistically the poorest of all. No form of round ball is used today except as large buck-shot or real short range indoor squib loads. Only meager accuracy can be attained for a short distance with it from the most perfectly drilled smooth-bore barrel. The use of greased snug patches helps some and each pioneer had his pet theory of how to attain some degree of accuracy with such a firearm. These practical men moulded their own bullets and got the best, or ultimate in this case, out of the firearm they were lucky to own. They also hunted small game with the same arm by using it as a shotgun.

The rifled gun really originated in Europe over 200 years ago but for various reasons never came into its

own until our Pennsylvania Rifle called the Kentucky Rifle, began to assert its superiority during the early 1700's. Some authorities give Caspar Zollner, a Viennese gunsmith credit for introducing the rifled tube during the 17th century. With the Kentucky the shooter began to get dependable practical accuracy, high velocity and considerable range despite the fact a round ball of rather small caliber was used. A combination of slow twist rifling which was deep or shallow, according to the idea of its maker, plus a long barrel and carefully moulded bullets and suitable patches seemed to give the ultimate for its period. Each one of these rifles had a certain charge of black powder that exactly balanced its round-ball and velocity ratio for the best results. The caliber of the Kentuckies ranged from 32 to 45. This meant a very light ball in proportion to the powder charge and the velocity was high. The spin of the little round bullet gave it additional rotation, velocity and its killing energy was way out of proportion to its weight and actual striking energy as we would figure it today. Owners of these fine rifles cherished their perfection and at all times were striving for the ultimate in performance.

Rifled arms firing elongated slugs were used and tried for many years previous to the Civil War. The Springfield muzzle loading 58 caliber rifled musket was one of the simplest and more common forms developed to get accuracy out of an elongated grooved bullet. Its hollow base Mini ball was moulded slightly smaller than the bore of the rifle and depended upon the explosion of the powder to expand it sufficiently to seal the bore and ride the rifling of the way out. For quick loading the powder charge was enclosed in a linen paper tube with the ball in one end. The user simply had to bite off the end of the paper tube, let the powder pour down the barrel and unroll the paper from the bullet and





EVOLUTION OF MILITARY RIFLES from the War of 1812 up to the Spanish-American War is represented by these rifles.

push it down with the ramrod. The 69 caliber musket preceding it used the same method. While both attained considerable more accuracy than the smooth-bore with round ball they were not nearly as accurate as the Kentuckies. Due to the better shaped projectile and added weight these arms did attain longer range and greater power. Rifles with false muzzles were used with elongated bullets and achieved great accuracy but were not practical as sporting arms due to their complicated loading system. These were used in special Schuetzen matches up until the early 1900's.

Under the stress of the great Civil War the tempo of inventions hit a new high in the search for better long range rifles, better bullet designs combined with rapidity of fire. All wars create this feverish upsurge in inventions—this desperate effort to get the 'mostest the quickest' to the field of operation. Confederate sharpshooters used the English Whitworth hexagonal rifled arm firing a

hexagonal shaped bullet which was considered the latest. The Union army countered with the long range breech loading Sharps rifle. Breech loaders were coming into their own and rapidly making muzzle loaders obsolete. Even repeating breech loading cartridge firearms were used in great numbers before the conflict ended. The Henry, the Spencer and Winchester 1866 were the three best.

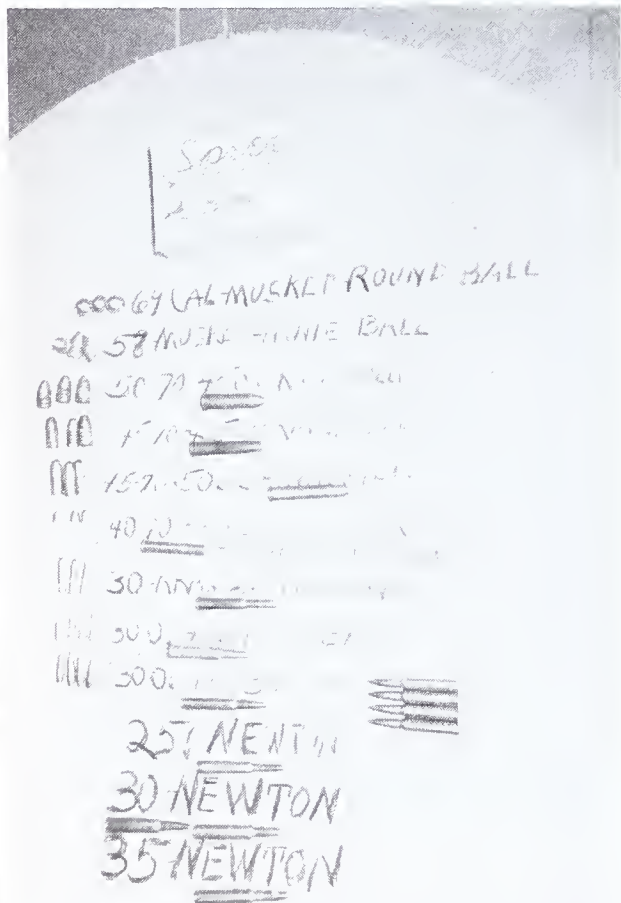
The post-war period between 1873 and the early 1900's produced further changes in the efficiency of rifling and bullet designs. From the short stubby flat nosed poor sectional density projectiles there emerged the elongated round nosed ones of exceptional good ballistic contour. Perhaps the leader in this post-war race was the Sharps Rifle as far as accuracy was concerned. It was called 'OLD RELIABLE' or 'BUFFALO SHARPS' and was a cherished possession of those able to own one. Later it was a consistent winner of the Creedmore 1,000 yard matches. The tremendous charges of powder and lead

used in these arms were the utmost in the perfection of lead bullet design, and power with the available powder, which in this case was black powder. Christian Sharps was a real American and a patriot. His formidable rifles seem to almost inanimately portray the rugged character of their designer whose life was moulded in the crucible of the Civil War and post Civil War period. The cartridges he used ranged from 40 to 50 caliber with the 44's and 45's preeminent. This was quite a drop in bore size from the 58's to 72's favored in the past. Sharps considered the 40 cal. about minimum and made some fine target arms in this caliber. The 45-120-550 Sharps buffalo cartridge was probably the utmost for its era. I once heard the old westerner Chauncy Thomas of Denver, Colorado say to a group of National

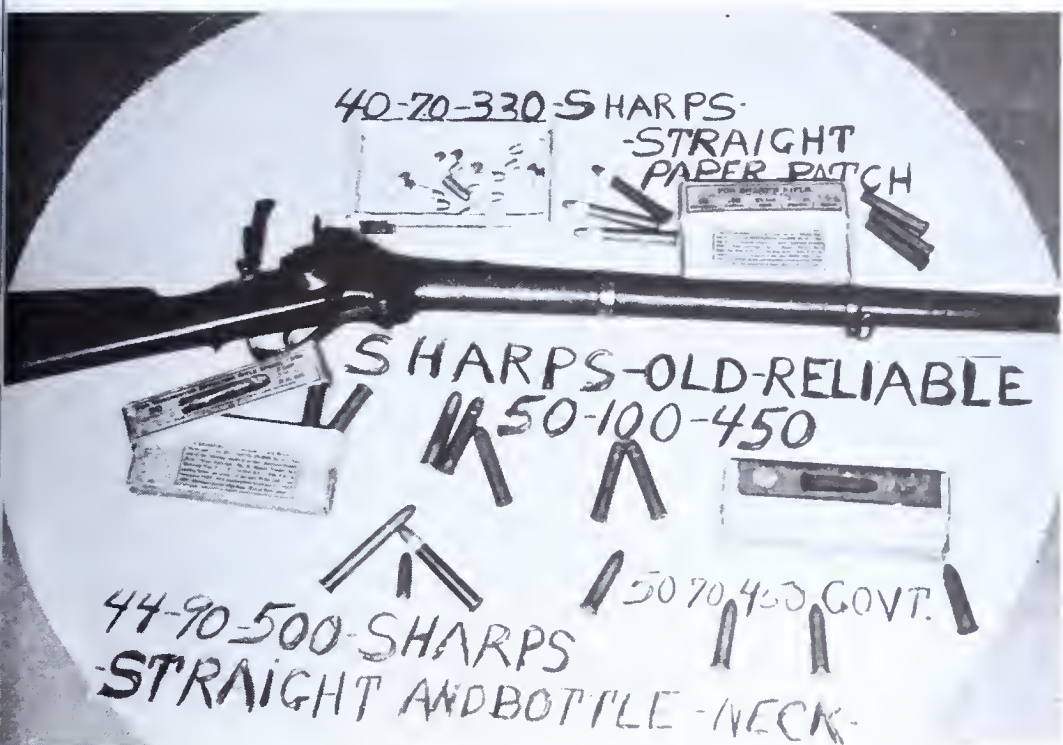
Match shooters "If I was in great danger and my life depended upon one shot and I could choose the arm it would be the 45-120-550 Sharps buffalo rifle." This sort of always impressed me as I knew this rifleman and big-game hunter understood firearms of all calibers and he was passing such numbers as the Winchester 50-100-450, as well as the 405 Winchester. The history of the Sharps Rifle makes interesting reading.

The trend toward smaller calibers and better profile bullets continued thru the 80's and 90's with attempts to get higher and higher velocity out of black powder. Some examples of this attempt were the 38-90-217, 41-110-260 and 45-125-300, all Winchester Xpress loadings. These were all extremes and failed miserably due to the huge powder charges not burning cleanly, fouling of the barrel, stripping of the lead bullet which was too short and light for the amount of powder used. A lot of the powder was thrown out of the barrel unburned and only 200 to 300 feet per second velocity was gained. Smokeless clean burning powder began to enter the picture about this time and immediately influenced the whole firearms picture. We were slow to adopt it however. We went into the war with Spain using the good but obsolete, Springfield 45-70 single shot black powder rifle. The Spaniards were armed with the 7MM Mauser repeating rifle using metal jacketed bullets and smokeless powder. This 7MM cartridge still bears the distinction of being one of the best. While we soon corrected the situation by issuing and adopting the excellent 30-40 Krag there was no excuse for our Ordnance Dept. being so totally inadequate and far behind. Four or five years before this war the Winchester brought out the excellent 30-30 and others were experimenting with small calibered high velocity magazine rifles using smokeless powder. While the Krag and 7MM and

EVOLUTION OF BULLET DESIGNS from the ancient musket round balls to the modern pointed boat-tail projectiles with excellent sectional density and slip-stream lines is shown below.







SHARPS OLD RELIABLE is pictured here from the gun collection owned by the author. This 50-100-450 caliber has a vernier tang peep sight and a wind gauge front sight. A few other Sharps calibers are shown. Note the paper patch bullets used for long range accuracy.

Germany's 8MM used the long slim round nosed bullets the Germans soon discovered the spitzer or pointed bullet overcame air pressure and wind resistance better than the round nose and promptly started using it. The U.S.A. changed to the pointed 150 grain 30 cal. flat based bullet in 1906 after discarding the Krag and adopting the Mauser type Springfield in 1903. For three years they stuck to the Krag 220 grain round nosed bullet in the -03 until they discovered it gained very little over the Krag in velocity, and practically nothing in range.

Before World War One the French discovered that giving the spitzer bullet a boat-tail contour increased its range nearly 50%, and increased the effective range of machine gun fire. While our Ordnance Department admitted they were right, little was done about it until after the war when tests for maximum range showed our military .06 cartridge

with the 150 grain flat based bullet was approximately 3,500 yards. The same cartridge driving a 172 grain nine degree boat-tail spitzer bullet reached out some 5,500 to 5,800 yards. Modern spark or electronic photography shows that a bullet travelling faster than sound (approximately 1,300 feet per second) develops a vacuum. The larger the area of its base and the faster it travels the greater the vacuum or tail drag. Streamlining the bullet cuts down this retarding effect. While operating the targets in the rifle pits I have often had inexperienced shooters ask what causes the sharp snap when a high speed bullet comes over well ahead of the rifle's report. The snap is caused by the air rushing in to fill the vacuum that is following the bullet in its vicious flight. This snap is noticed at the long ranges more so than when close to the rifle. 200 to 800 yards is where one notices it most. We get the same sound effect

many thousand times fold when a jet plane breaks the sound barrier or when a flash of lightning produces a vacuum and the air rushes to fill the vacuum with a loud thunder-clap.

Up to now the long stream-lined boat tail and modern flat base pointed bullets seem to be the ultimate for accuracy. Actually it is only at the maximum range the boat-tail shows its superiority. Research in metallurgy has kept pace with the development of tough metal jacketed bullets and hotter modern powders. Steels have gone from a tensile strength of only 40,000 pounds to the square inch to probably 200,000 by now. Cartridge cases have developed from thin folded heads capable of being safe with no more than 15,000 lbs. pressure to heavy solid heads capable of standing a minimum of 60,000 lbs. pressure. Modern rifle cartridges are all made rimless or belted semi-rim for convenience in box type magazines. Rimmed cases for new cartridges are in the revolver category only and tubular magazines are limited to flat nosed bullets with no new firearms being made for them except 22's and the popular numbers that refuse to die like the 1894 Winchester and 336 Marlin, in 30-30 and

32 Special. Remember fellows, enjoy the old timers all you can. I like them as well as the most modern, but don't over load or take chances in your search for their best balance load—accidents do not happen, they are caused. If you reload for the old as well as the modern, do it carefully and above all, do not use a measure for maximum loads—use an apothecaries scale and understand its use as well as the type of powder you are using. A careless reloader cannot duplicate the high standard of excellence found in modern factory ammunition. However, the careful reloader can not only equal but in many cases improve on nearly any factory product. This fact especially applies as far as the performance of his particular firearm is concerned. To a deer hunter the ultimate in accuracy may apply to an old 'thut' he has used for years. A four inch group at 100 yards may be his best and suit said hunter. On the other hand a perfectionist may be striving for under two inch group at 300 yards with a 243 Winchester varmintier with a 20X target scope. Indefinitely the "SEARCH FOR THE ULTIMATE IN ACCURACY" goes on and on.

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## OUTDOORSMAN'S GUIDE TO NORTHEASTERN PENNSYLVANIA

Just off press is a new guide to hunting and fishing in northeastern Pennsylvania. Written by three veteran sportsmen who live and avidly pursue their sport in this section of the state, the "Guide" contains complete, easily followed directions to 256,259 acres of public hunting and 244 lakes and streams. The authors: Frank Stout, Outdoor Editor of the "Scranton Times"; Gene Coleman, staff writer of the "Scranton Times" and frequent contributor of outdoor articles to national magazines; and Ed E. Rogers, also on the newspaper staff. In addition to detailed instructions for reaching each hunting or fishing area, the booklet contains a wealth of information on tricks for trout, first aid, archery, bass fishing, deer hunting, woodchuck hunting, ice fishing, turkey hunting, and many other subjects of vital interest to sportsmen.

Priced at \$1.00, the OUTDOORSMAN'S GUIDE is available from the NEPA Publishing Company, Factoryville, Pa.





# Diamond Jubilee Tournament

By Tom Forbes

**T**HE 75th Annual Championship Tournament of the National Archery Association of the United States will be held on the Campus of Franklin and Marshall College at Lancaster, Pennsylvania on August 17-21, 1959.

The National Archery Association, known as the NAA, was organized in 1878 and is the official ruling body for target archers. Organized archery in the United States began with the formation of the United Bowmen of Philadelphia in 1828. This club shot regularly in Philadelphia for a period of thirty years prior to the Civil War. Trophies for which the members competed are on display at the Pennsylvania Historical Society in Pennsylvania. With some modifications

target archery in the United States developed along the lines which governed the sport in England. With the introduction of gunpowder the bow was dropped as a military weapon and relegated to the field of sport by the leading European Nations. Near the end of the 18th Century the Royal Toxophilite Society of London was formed and rules were promulgated for the sport. The Grand National Meeting at which the Championship of England is determined is held yearly. The first meet was held in 1884.

Last year the Annual Championship Tournament of the NAA was held at Fort Snelling, Minnesota. This is the third time in the history of the Championship Tournament that Pennsylvania has been the Host State. The modern archer is a marksman and all-time records are broken each year in National competition. The oldest unbroken record was held by Pat Chambers who shot 196 of a possible 212 at 60 yards during a



single York Round in 1938. J. Caspers of Wisconsin topped this score in the 1958 tournament with 202. The introduction of the sight on a bow and the materials used by the manufacturers in the construction of the modern laminated bow have made possible the high scores shot by today's archers.

Champion Target Archer of the United States is an honor highly prized by the holder and the defending champions will be on hand to defend their titles at Lancaster. The defending Men's Champion R. Bitner of Michigan established an all time record for the single and double York rounds. A York round consists of 72 arrows at 100 yards, 48 arrows at 80 yards, and 24 arrows at 60 yards. A possible, with every shot in the bull's eye, which is  $9\frac{3}{8}$ " in diameter would be 1296. Bitner's score: 983-972, a total of 1955 for a double York Round.

The defending Ladies Champion is Mrs. Carole Meinhart, a Pennsylvanian from Pittsburgh and member of the Pittsburgh Archery Club. She is a former World's Champion and holds the all-time records in NAA annual competition for the Single National Round, 72-578 and the Double Columbia Round, 144-1214 shot in the 1957 annual tournament.

Competitors in the National are divided in two main divisions—Men and Women. Each division is further divided into groups as follows: Seniors, Intermediate, Juniors, and Beginners. A contestant's age determines the group in which the individual may participate. The championship rounds differ for each age group and between Men and Women. Generally speaking the Men's division shoots the greatest number of arrows at the longest yardages; while the beginners shoot the least at the shortest yardages.

The Annual Tournament of the N A A includes the following events. For Men: a double York round, a

double American round, a team round of 96 arrows at 60 yards, flight shoot in regular style and flight shoot in free style. For Women: a double American round, a double National round, a double Columbia round, a team round of 96 arrows at 50 yards, and a flight shoot in regular style. For Intermediate Boys: a double Hereford round and a double American Round. For Intermediate girls: a double National round, a double Columbia and double American Rounds. For Junior Boys: Four Junior American rounds and for Junior Girls: a double Columbia and a double Jr. American round. Beginner Girls shoot four Junior Columbia rounds and Beginner Boys the same. The Champion Archer of the United States shall be the member of the N A A, who in the annual tournament, has the highest result obtained by adding together the scores of his double American and double York rounds. The Champion women archer of the United States shall be the woman member of the N A A, who, in the annual tournament has the highest result obtained by adding together the scores of her double Columbia and double National and double American rounds. In addition to the events listed there is Crossbow and Barebow competition, Clout and Wand shoots. In free flight Charles Pierson shot an arrow 774 yards in the 1955 tournament. This is 44 hundredths of a mile, or 106 yards short of half a mile.

A Pennsylvanian, Clayton B. Sherer of Ronks, is the current President of the National Archery Association. He is, in addition, Secretary-Treasurer of the Pennsylvania State Archery Association and Captain of the American Archery Team which will represent the United States this year in International competition at Stockholm, Sweden. Field Captain for the Target Tournament is Robert Albright of the Pittsburgh Archery Club and the Lady Paramount is Mrs. Lois A.



bright. At last year's annual tournament Bob Albright turned in a six Gold's at 80 yards. In the 74 years of competition this feat has been accomplished only four times.

To compete in the Diamond Jubilee tournament an individual must be a member of the N A A. Advanced registrations are required and must be made before July 17th. Target fees are \$15.00. In case an individual is unable to compete the target fee will be refunded. Schnader Hall, a new dormitory on the campus of Franklin and Marshall College at

**LADY CHAMPION** Target Archer of the United States is Mrs. Carole Meinhart, a Pennsylvanian from Pittsburgh and member of the Pittsburgh Archery Club. She is a former World's Champion and holds the all-time records in NAA annual competition.



Lancaster will house the contestants. Meals will be served in the cafeteria which is located in the building. Schnader Hall is adjacent to the shooting field.

What will it cost an archer to attend and shoot in this tournament? Lodging and three meals a day in the college dormitory will be \$8.00 per day for those occupying the dormitory for 4 or more days. Less than four days will be charged \$10.00 per day. If you desire lodging only the rate is \$5.00 per day per person. Persons desiring single meals during the week who are not staying at the dorm can secure breakfast for \$1.00, lunch for \$1.50, and dinner for \$2.50. In addition there is a Pennsylvania sales tax of  $3\frac{1}{2}\%$ .

Reservations for meals and lodgings must be made in advance for the college dormitory. Payments are required before August 10th. Refunds will be allowed if notice is given prior to August 14th. The request for reservations should be addressed to Mr. Richard H. Winters, c/o National Archery Association, Franklin and Marshall College, Lancaster, Pennsylvania. Lancaster has a number of Hotels and Motels. Those desiring accommodations of this type are requested to contact the Lancaster Chamber of Commerce, 33 W. Orange Street, Lancaster, Pennsylvania.

On Sunday August 16th the Lancaster Archery Club will hold an invitation tournament for those who come to participate in the National. Lancaster has much of historical interest for the visitor. "Wheatland," the home of President James Buchanan is open to visitors. This is the land of the "Plain People." Lancaster County is one of the richest farming communities in the nation. The horse and carriage are still much in evidence on the roads throughout the county. Amish farmers reject "worldliness." They do not use the automobile. Men, women

and children, garbed in a style that has remained the same for three hundred years mingle with persons dressed in accordance with today's dictates on Lancaster's streets, at the country markets, and in Lancaster's stores. Especially on market days the visitors will see these bearded men in low crowned black hats and black coats fastened with hooks and eyes; women in bonnets and long, plain, but brightly covered dresses covered in part by a black shawl; and children in clothes the exact replicas of those worn by their parents.

This is the home of Shoo-Fly pie (Molasses Crumb Pie) and Schnitz Un Knepp (Apples and Buttons) Doughnuts are called Fastnachts and are traditionally served on Shrove Tuesday. Pennsylvania Dutch cooking is renowned throughout the United States. Food in the traditionally "Dutch" style is available at good hotels and restaurants in the city.

For the out-of-state visitors, historic Gettysburg Battlefield is a motor trip

of 53 miles from Lancaster. Ephraim Cloisters, home of an early religious group, was erected in 1733. The Cloisters was used as a hospital for wounded American soldiers during the war of the Revolution. The primitive buildings, fashioned from home made materials, with wooden pillows for the beds, open fire places, clay-lined wooden chimneys and pewter utensils are interesting examples of early life in America.

Shooting the National is more than just another tournament. It is an old home week for a group of congenial people from every state in the Nation who have a common bond in archery. For the archer family it is vacation time. Lancaster County with its well kept farms and the rolling fields of grain, the wooded hills, good roads, excellent food and hospitable people will make your visit to this year's National the one to remember. Good shooting!

### **Federation Issues New Water Problem Booklet**

The National Wildlife Federation has announced publication of a new booklet, "Our Growing Water Problems," by R. G. Lynch of Milwaukee.

The 60-page publication treats, on a national scale, the complex problems of managing public water resources for diverse and conflicting needs of a rapidly expanding human population. In obtaining material, the author interviewed informed sources in all regions and states.

After outlining some of the difficulties in a brief foreword, Lynch says: "These are water problems of far greater importance to the nation than the interests of men who want to use water to make a dollar or abuse it to save one."

Lynch discusses confusion, water trouble and use and supply. This is

followed by chapters on remedial and water laws, including a discussion of a "model act." The booklet then outlines waste disposal, status of the water supply situation in five regions of the U. S. and concludes with his comments and observations.

Lynch, 60, is a veteran newspaperman. Of his 42 years in the field, 15 have been spent on the *Milwaukee Journal*. He served as sports editor of the *Journal* for 24 years, during which time his column, "Maybe I'm Wrong," was quoted nationally.

Single copies of "Our Growing Water Problems" may be obtained without charge from Education Servicing, National Wildlife Federation, 232 Carroll St., N. W., Washington 12, D. C. In quantities up to 25 the price is 25¢ per copy. In greater quantities a discount of 10 per cent will be allowed.





## Annual Questions On: Getting Ready

By Leroy J. Kopp

**Q.** I graduated from high school last year and would like to run a trapline this fall. How many, and what kind of traps should I purchase?

**A.** To begin with you should plan to trap a variety of fur animals, including muskrats, skunks, raccoons, minks, and fox, among others. If this is your plan, the most practical thing to do, is to buy approximately two dozen regular No. 1 traps (either long-spring or under-spring types), at least one dozen No. 1 stop-loss style traps, and one dozen No. 2 coil-spring traps. The No. 1 traps are quite suitable for trapping all com-

mon fur animals except fox and mink; No. 2 coil spring traps are most ideal for the latter two animals. Additional traps can be purchased later on, depending on the kind of furbearers you prefer to trap.

**Q.** Where can I obtain traps and other equipment?

**A.** From trapper's supply dealers who advertise in trapping and other outdoor magazines. An inquiry directed to the Animal Trap Company, Lititz, Pennsylvania will bring you the name of your nearest dealer.

**Q.** What other kind of equipment do I need?

**A.** If you plan to trap foxes, you will need stakes, dirt sifter, rubber-coated gloves, camp-ax (or other type of hammer for driving stakes into ground), pack-sack or basket, and some good commercial bait and lure.



Some bale-wire and pliers are essential gear on the muskrat trapline. Then too, you will need a good skinning knife, some fur-drying boards, and of course, other equipment will suggest itself as you gain experience.

**Q. Where can I buy the best bait and lure?**

A. This is a difficult question. There is no such thing as the best lure or bait. All commercial bait and lure is prepared by expert trappers, or made according to the advice of an authority. The purpose of bait and lure is to attract animals to your traps, and since all animals have a sense of curiosity, any bait or lure which has an odor will do the trick.

**Q. Is it absolutely necessary to use commercial lure for all fur-bearers?**

A. No it is not. Sardines are probably the very best all-around bait you can find for skunks, opossums, raccoons, and even gray foxes. No lure or bait is necessary for muskrats. However, it has long been established that a trapper who uses lure and bait for foxes always ends the season with far more pelts than the trapper who uses none.

**Q. Is it important to use fox urine at a set, in addition to lure?**

A. It isn't necessary but pure fox urine helps. For that matter, if you use a generous amount of fox urine at your sets, you need no extra lure at all.

**Q. Since both red and gray foxes occur on my trapline, and being that they are known to dislike each other, which kind of urine should I use?**

A. You certainly should give some thought to this so that you can better determine what to buy and what not to buy. If you feel that gray foxes predominate, buy gray fox urine. On the other hand, if red foxes are more numerous, use red fox urine. In the event that this cannot be ascertained, or should an equal number of both

species occur in your territory, your best bet would be to use only red fox urine. Red fox urine attracts gray foxes, but gray fox urine seldom attracts red foxes.

**Q. What about bait?**

A. Any commercially prepared fox bait designed to attract both species of foxes ought to be used.

**Q. Where and how can I obtain practical and inexpensive information on trapping techniques which I could study?**

A. Back issues of GAME NEWS contain numerous illustrations which show some of the most common techniques. Also, a new booklet: *Pennsylvania Trapping and Predator Control*, is available from the Game Commission at twenty-five cents per copy. Written by one of the state's leading authorities on trapping and pelt care, this booklet is an invaluable aid to beginning trappers everywhere. You might also join and attend the Pennsylvania Trapper's Association, which meets each year and features outstanding trappers who demonstrate furtaking techniques at no charge. For further details, contact the president of the organization: Eugene R. Hill, 6772 Marshall Road, Upper Darby, Pennsylvania.

**Q. I am anxious to save as much money as I can and would like to know whether there is anything I can do in this regard?**

A. There certainly is! Check the references just mentioned and you will discover information on how to make your own fur-drying boards, trap stakes, bait and lure, trap nameplates (required by law), and dirt sifters, among other items.

**Q. Do I need a special license to trap fur bearing animals in Pennsylvania?**

A. No. A regular, resident hunting license entitles you to trap all legal fur animals found within the Commonwealth. To be safe, check the information booklet which accompanies



hunting licenses, or secure a free copy of the Pennsylvania Game Code.

**Q. I have a brother (or a friend) who may wish to become my partner. Is it a good idea to have a partner?**

A. Yes—by all means. There is nothing like having a good partner, provided that your buddy is willing to do his share of the work. Some reasons why a seriously interested partner is a good idea, are: Sickness may prevent you from visiting traps on some days; unexpected chores at home may also interfere with trapline operations; or one of you may even want to attend an affair such as the State Farm Show. Somebody has to look after the trapline! Remember, too, that accidents can happen on a trapline. Some serious, but most of them minor. Nevertheless, it is always good if you are not always alone on the trail. Probably the best thing of all is that you and your partner will have thrilling experiences to discuss and enjoy long after the trapping season is over.

**Q. Is it a good plan to have a dog along on the trapline?**

A. Not ordinarily. A well trained trapline-dog can be extremely valuable in locating trapped animals which sometimes manage to escape with traps, but training a dog to trail a variety of fur animals requires a lot of patience and skill. Also, it helps a great deal if the dog has a natural flair for following all sorts of animal trails. Generally speaking, a dog which is not trained to remain close by at all times, should be left at home. You will only add to your duties in the form of calling your hound off a rabbit trail, or releasing it from one of your traps. In other words, the average dog is a nuisance on the trapline!

**Q. Should I carry a gun on my trapline, and if so, what kind?**

A. Yes, a gun is very useful to any trapper. The most ideal type is a 22



calibre rifle. Many trappers, especially beginners, generally prefer to obtain a used, single-shot rifle.

**Q. Is there anything else I can do to get ready for the coming trapping season?**

A. Yes. Probably one of the most important things is to obtain permission from landowners on who's land you wish to trap. It does not pay to prospect a likely-looking territory only to discover that the owner does not allow or approve of trapping on his land.

It might be a good idea to secure a first-aid kit just in case you might need it.

And by all means get a notebook and pencil to carry with you. A daily diary is not only interesting to read years later, but it is quite important to keep a record of the dates on which you catch foxes. This information is needed when you fill out your affidavit to claim bounty payments.

When you have prepared yourself as outlined here, you are ready to start prospecting, which will be covered next month.

# Canine Distemper

By Richard A. Wolters

**T**HERE is an alarming amount of canine distemper spreading through the country, according to Dr. James A. Baker, director of the Veterinary Virus Research Institute at Cornell University. Distemper is an acute, highly contagious virus disease. Indications are it is most prevalent in New England and is spreading rapidly.

Here are the latest protection facts from the Cornell laboratories.

A new, important discovery has been made. There is now an accurate test of dogs' immunity against distemper. This is the first step in controlling the disease. A blood sample to the New York State Veterinary College, Diagnostic Lab, Ithaca, N. Y. The lab charge for this test is \$2.50.

A second part of this new test will take the guess work out of immunizing a puppy against this killer. A blood sample of a bitch taken just before breeding or during the first month of pregnancy will establish a mathematical relationship between the immunity of the female, the natural protection she transfers, and the duration of such protection for the pups. This makes possible a determination of the age, within a few days, at which the permanent vaccine will be effective. This will eliminate the temporary shots.

The new research has shown that these temporary hold shots interfere with permanent immunization and that the vaccination will not take if the shots are given before the natural immunity the bitch passes on to the pups wears off.

Some bitches transmit no immunity and some give enough for 12 weeks. Few pups will be immune for the first few months. The unknowing dog owner who gives the shots at 9

weeks as standard practice could find himself in a situation where his dog has had 9 weeks of no protection or no protection after the mother's natural immunity wore off, because it interfered with the inoculation.

The study shows that 20 per cent of all dogs successfully inoculated lose their immunity by the end of one year. This means the blood test should be made yearly.

For those who now own dogs here is what is recommended:

1. There is no assurance that the dog is immune because it had distemper shots as a pup. For protection, revaccinate and run a blood test.

2. Very young pups should receive an inoculation of live virus vaccine, not anti serum. The Cornell findings put no faith in anti serums which have customarily been used for young pups. At nine weeks, the live virus inoculation is repeated. Twenty-one days after the nine-week shot, a blood sample should be sent for immunization test.

3. All revaccinations should be done with live virus vaccine.

4. Booster shots with Kill Tissue vaccine give only 3 to 5 months of immunity. Many vets use it. It is easy to handle and they hope the dog will get a "street infection" in the meantime, which will produce a lasting immunity.

5. Booster shots for a dog that is immune are waste of money for they will not raise the level of immunity.

It may be a long time before a cure for distemper is found. At least now there is a control. The \$10.00 lab fee for the Normo Graph on pregnant bitches is the "insurance policy" that her pups will be immunized through the first year, which is the period of high mortality.



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AUGUST, 1959

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# THE STORY BEHIND THE COVER

**I**N a family noted for beauty, the Blackburnian Warbler is outstanding and is considered by many observers to be the loveliest of the warbler tribe. In summer, when it shows a decided preference for high conifer trees, the dark green or gray background against which it is seen makes an ideal setting to prove the point. Like the redstart and the oriole, this brilliant warbler flashes flame.

The Blackburnian, like other warblers of its class, is furthermore a bird of action. It is constantly on the go in search of its small insect prey. No one who has seen the male bird in full sunlight in the top of a dark spruce tree will soon forget the sight.

In Pennsylvania this warbler is a common migrant in early May and again in early September. Some of them commonly stay for the summer in the northern counties as well as down the mountain ranges which sweep south across the Commonwealth. Here it nests in evergreen trees, usually high above ground. The nest is built of small twigs with hair, rootlet or grass linings. Four eggs, blue-green to gray with brown and lavender spots and blotches are incubated in June by the female.

Within a few months, Blackburnian Warblers are again on the move southward, heading for Venezuela and Colombia to Peru and the Yucatan. Some will leave this month but the bulk of the migrants are passing through Pennsylvania during September. By early October, the bright flash or orange and black among the tree tops will be missing until another year.

Like all the members of its family, this warbler is a valuable and colorful addition to our native wildlife. For those who take their bird watching seriously, it is a welcome addition to the check list each summer. And for the sportsman, the flash of color in the dark and deep woods is always a pleasant surprise.



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AUGUST, 1959

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## Junior Riflemen

SUMMER always presents a perennial problem for parents—how to keep Junior occupied in an interesting, health-building and safe activity. The normal American youngster is full of active energy that demands an outlet, particularly when school is closed, summer is on the wane, and all of the games, hobbies and athletic competitions have run their course. August is one of those periods of time which usually try the patience of even the most ingenious fathers and mothers.

But August is also a month when a good many boys and fathers begin to think about the approaching hunting seasons. Most boys, of course, think about hunting and guns most of the time, as many a sparrow and starling discovered the day after school was dismissed for the summer. This month, therefore, is an ideal time for some serious thinking about guns and how they are to be used.

Like automobiles, airplanes, bicycles or baseball bats, guns are a means of great pleasure and enjoyment. Practically all boys and a good many girls like to shoot them. But like all things mechanical, the ratio of pleasure to use hinges on the fulcrum of safety. Safety is an acquired characteristic, neither inherited nor accidental. It's a bit like that mysterious quality called common sense. Some of it can be learned through trial and error, providing the mistakes do not prove fatal. But safety is almost entirely something that is taught to a person.

There is no better time to teach gun safety than right now. There is no better place to start than right here—in your community with your youngsters. Junior, and his friends, should be taught how to use a firearm correctly and safely. A youngster who takes a course of qualified instruction at a junior rifle club or in a hunter safety school can practically always be trusted to handle firearms properly and he or she will usually take pride in passing along this new found knowledge to associates of his own age.

Interested parents (and that should include everyone) will find plenty of help available to organize and conduct firearms safety training. Pennsylvania has thousands of qualified instructors certified by the National Rifle Association and the Pennsylvania Game Commission. They have been trained for a purpose. That purpose is to keep Pennsylvania a safer, more pleasant place in which to live.

This month, and in every month of the year, help to organize hometown clubs and classes in rifle marksmanship and firearms safety. Through proper training and guidance, our youngsters can become a generation of accident-free riflemen and outdoorsmen.







# Pennsylvania Moose

By J. Herbert Walker

**P**ENNSYLVANIA gunners who go into the deep woods of Canada to hunt moose—at least a majority of them, perhaps, as well as the rank and file of gunners in the Keystone State—do not know that this great animal once was a part of the landscape here. But, like the buffalo, the panther, the wolf and the native elk the moose has passed from the Pennsylvania scene.

Historical evidence is not plentiful, but there is sufficient convincing data of the presence here of the moose.

Dr. J. D. Schoepf, famous and distinguished German army surgeon and important naturalist, traveled extensively in Pennsylvania in 1783-1784. In his "Travels in the Confederation," and in writing of the Wind Gap in Northampton county, he says this:

"The farmers were not well content with their lands. The nearness of the mountains brings them in winter unpleasant visits from wolves and now and then bears. And there is no lack of other sort of game; deer and foxes are numerous; elks wander hither at times. From the several descriptions furnished by the people hereabouts, it seems that they give the name 'elk' to the moose, as well as to the Canadian stag, and so give rise to errors. Both animals come down from the North, where one is known as Moose, Black Moose, or Original, and the other (the Canadian stag) as Gray Moose to distinguish it from the first."

Dr. Schoepf, further in his book and in writing of the area between Carlisle and Fort Pitt (now Pittsburgh, of course) has this to say: "The commonest wild animal is the Virginia deer; the Gray Moose, very similar to the European stag, has also

been seen in these woods; but it is more numerous in Canada."

The "History of the Lackawanna Valley," published in 1857, says this:

"Around this camp (Tripp's Meadow, near Scranton, a famous camping and hunting ground) game was abundant. The elk and the fleeter moose stood among their native pines, or thundered onward like the tread of cavalry, the deer in fearless mood browsed on the juicy leaf."

On the same page the author of the Lackawanna Valley history, says:

"The Moose, from which the mountain range bordering the Lackawanna — The Moosic — derived its name, were found here in abundance. Deer and elk, at that period, thronged along the mountains in such numbers that droves could be seen browsing upon the budding saplings or lazily basking in the noonday sun."

Samuel N. Rhoads, in his great book "Mammals of Pennsylvania and New Jersey," published in 1903, has the following to say under the title of Eastern Moose: "The fossil remains of moose have been found in Pennsylvania caves. Certain statements of earliest travelers indicate that the moose was found on the west shores of the Hudson river opposite New York and in northeastern Pennsylvania. There is a Moosic in Lackawanna county; a Moosehead in Luzerne county and Chinklacamoose, in Clearfield county."

Dr. George P. Donehoo explains Chinklacamoose. In his book "Indian Villages and Place Names," he writes there are nearly as many meanings to this Indian name—the name of an Indian village on the present site of Clearfield—as there are various forms of the name itself. However, the one

most experts and students accept is "large laughing moose." Clearfield, of course, derived its name from the great, cleared fields where herds of buffaloes grazed.

Col. Henry W. Shoemaker, the late state folklorist, says: "The moose has left his name indelibly at many places in Pennsylvania. There is a Moose Pond, in Kidder township, Carbon county; there were said to be moose ponds in Susquehanna, Wayne, Pike and Monroe counties in the early days—and this would seem to be ideal territory for moose since they were fond of lakes and ponds. There is a Moosehead in Foster township, Luzerne county; there is Moosic Mountain—'The Imperial Moosic' of the Poet Caleb Earl Wright, in Luzerne county. There was a Moose Run in Centre county; the Moshannon, or Moose-hanne (Moose Stream) forms the western boundary of Centre county, dividing it from Clearfield. The Black Moshannon creek, or Black Moose Stream is a creek in Centre county. There is a Moose Run and Upper Moose creek in Clearfield county."

In Doughty's "Cabinet of American History," a Philadelphia correspondent tells of the finding of a fresh set of moose antlers in a salt lick near the New York state line. An investigation shows these antlers were dug up in 1819 by Jim Jacobs, a noted Indian hunter, at a spot which is now in the centre of the city of Bradford, McKean county. Moose were also seen in the vicinity of Elk Lick, Somerset county.

Mention of this noble animal is made in other historical works, especially those pertaining to the northeastern, northern and northwestern parts of Pennsylvania. The moose also is mentioned in some writings of early days far down in the high plateaus of Somerset county. So it may be said the moose was found in the greater part of Pennsylvania in ancient years.

Some historians are awry in their

statements by confusing the moose and the elk—and this makes research difficult. The historians, however, should not be charged completely with the errors—they are historians and few of them are naturalists; they put down what they were told by early settlers and pioneers and hunters. Records show that most of the early German settlers and pioneers called the moose an elk.

When was the last moose killed in Pennsylvania? The search for that record is still going on. As mentioned previously Jim Jacobs found a fresh set of antlers in McKean county in 1819. Records show the last moose killed in New York State was slain at Raquette Lake in August, 1861. It may be assumed that the last one was killed in Pennsylvania about the same time.

Verplanck Colvin, State Engineer for New York, in his report on the "Adirondack Wilderness," transmitted to the legislature at Albany in April, 1874, writes:

"As a matter of zoological and general interest, I may mention that in a few of the most remote portions of the wilderness we have met with indications of the moose, which to some of the guides seemed unmistakable. This gigantic animal is, however, almost extinct in the Adirondacks and I would suggest that it be made, in the future, unlawful to kill or destroy the animal in any season."

There cannot be any mistake about the moose being in Pennsylvania. There is historical evidence to be sure and there is the traditional information gathered by folklorists within the past quarter of a century from mountain people who have reported the tales of their grandfathers or great-grandfathers. This traditional evidence is exceptionally strong and reveals beyond doubt the evidence of these great beasts in Pennsylvania.

It all dovetails together.

Interviews by historians and folklorists at the turn of the century with



Seth Iredell Nelson, John Q. Dyce, Clement F. Herlacher, Lewis Dorman, Josiah (Josh) Roush, Jesse Logan—grand-nephew of James Logan, Indian orator with whom the writer of this article talked at the Cornplanter Indian settlement in Warren county early in the present century—have recorded reports of their immediate ancestors who had not only seen, but hunted, moose in Pennsylvania. These men from whom the moose records were obtained were all hunters in their own rights and loved the tales of the hunting trails.

Many of the early historians in Pennsylvania called the moose "The Original," indicating that the early pioneers and settlers believed the moose was the ancestor of the elk and the deer, also native of Pennsylvania. Early settlers, too, could easily mistake the elk and the moose since they had to rely on whatever meagre information they could obtain from others as to the actual identity of our wildlife forms.

Samuel Merrill, in his fascinating "Moose Book" published in New York City in 1916, proves that the name is not "original" but "orignal" and that it was derived from a Basque word "orenac," meaning deer. Merrill contends this was corrupted by the French-Canadians into "orignac" and then to "original." In Pennsylvania it was "The Original."

Jesse Logan had heard of the presence of moose in Pennsylvania during his father's lifetime. Logan told of how the moose would seek the deep pools of the Moshannon and perform strange evolutions when "the horns of the crescent moon were upturned and that no Indian would kill a moose at such a time."

Daniel G. Brinton, in his "Dictionary of the Lenni-Lenape Indians," says the Delaware Indian word for moose was "Mos." One sees that clearly in Moshannon.

John C. French, in his records so carefully and painfully kept, says Ed-



win Grimes (born 1830) heard some of the old men, back around 1840, tell of having killed or hunted "The Original" about 1770 and later.

Captain John Titus, when he was 97 years old in 1881, recorded that the moose had disappeared by that time in western and northern Pennsylvania. He called them "wood-eaters" and that they were called "The Original" by some of the people. Some of the largest moose, according to his writings, were seven feet high at the shoulders and that their short necks and long legs fitted them for feeding in trees and among high briars or in water where plants floated on the surface or close to it.

Apparently large numbers of moose left their abodes in the Adirondacks during extremely cold winters and crossed the Mohawk river, followed the Catskills down through Schoharie, Greene, Ulster and Sullivan counties of New York State, to Narrowsburg, where they crossed the Delaware river into Pennsylvania and from there they followed the main chain of the Alleghenies southwesterly through Wayne county, with its many lakes, and Lackawanna, Wyoming, Sullivan, Lycoming, Clinton, Centre, Clearfield, Blair, Cambria, Bedford and Somerset counties and thence down into Maryland. There is no

record of their visitations farther south than Maryland.

Side trails of these gigantic beasts took them into Monroe, Pike and Susquehanna counties, a region of lakes and terrain similar to their more northern abodes. From Monroe county other trails led on through the Wind Gap of Northampton county. Moose seen or killed in Huntingdon, Mifflin and other counties, were presumably driven there by either Indian or early white settlers and hunters. There are some evidences that the moose also appeared along Pine Creek, southwest of Wellsboro, Pine Creek being the once-beloved Tiadaghton, or River of Pines, of the Indians.

Dogs belonging to Jacob Heller, landlord at the tavern at Wind Gap, chased a moose into exhaustion nearby. A pair of brothers by the name of Buchanan killed a moose south of the Juniata river in the vicinity of what is now McVeytown. There are other records of slain moose during the years 1780 and 1790.

Apparently the moose slain by the Buchanans in 1790 comes close to being the record of the last one brought down in that part of the state.

The antlers of the moose that hung over the fireplace in the Heller Tavern at Wind Gap measured 78½ inches and weighed a trifle over 91 pounds, as measured and weighed by Marks John Biddle, a noted Reading attorney. That comes pretty close to being a record for any moose antlers.

Landlord Heller said the antlers he was so proud to display were taken from the moose that had been driven by dogs and, exhausted, staggered and fell to the ground. Adam Gross, a farmer living nearby, rigged up a block and tackle and with the aid of a half dozen men then lifted the moose onto a "stone boat"—a sort of low sled—and took it to the tavern barn. They said the brute weighed nearly a ton. It was placed, in its ex-

hausted condition, in a special stall and everything was done to revive it. But it died—and was propped up in the barn as long as the cold weather lasted. Settlers, hunters and others from miles around came to see it. When the weather began to turn warm the animal was butchered. There are reports of other sets of moose antlers at other places in the vicinity of the Wind Gap, one of them having been in the old Eckhard's Tavern.

Donehoo says the word "Moosic" is probably a corruption of Moos, meaning "elk," and, quoting the word elk he indicates that there was confusion in regard to the word "moos," for in another section of his book he quotes J. M. B. Hewitt as saying Chinklacamoose means "large laughing moose." A study of words indicates the early settlers confused the moose and the elk and called them both elk. Hewitt was a Tuscarora Indian by birth and also spoke the Seneca language. He served for years in the Bureau of Ethnology.

Moshannon, says Donehoo, is a corruption of Moos-hanne, meaning "elk stream," and here, again, there is a confusion. Moshannon actually means "moose stream," with the suffix "hanne" meaning stream. We find "hanne" in the Susquehanna, in the Loyalhanna and in some other waterways.

It is a far cry from the days of the moose in Pennsylvania, just as it is a far cry from the thundering tread of the buffaloes, the scream of the panther, the bugling of the native elk and the howl of the wolf. Time has blotted out their trails, their lairs, their dens and has almost submerged the meagre records of these beasts in the Pennsylvania hills.

Yet, take a map of Pennsylvania and read the names of streams and mountains and areas—the Susquehanna, the Juniata, the Allegheny, Bald Eagle, Lehigh, Lycoming, Erie, Tioga, Venango, Nittany, to name





but a few—all Indian names that, though the Red Man has vanished forever into the shadows he has left behind him sweet-sounding names which linger like melodies all over the state.

Vanishing wildlife also has left its mark, in streams and mountains and other natural features—Elk county, Buffalo Valley, Panther Rocks, Wolf Run, Moosic—one could go on and

on. Study the map of the Keystone State and see how extensively wildlife has left its names in the geography of our commonwealth.

You cannot wash out those names—Indian and animal—both vanished from the scene. You will find pleasure in looking over a map of the state and you will find it also a rewarding experience with its echoes of the days that are gone.

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### NEW GUIDE TO POCONOS

Just off press is a second edition of "THE POCONOS—An Authentic Handbook and Guide to Pennsylvania's Vacationland." Written by Thomas H. Knepp, the 145 page handbook is profusely illustrated in both color and black and white. It contains complete descriptions of points of interest throughout the northeastern part of Pennsylvania, including a history of the region, things to do and see, summer camps, winter resorts and skiing plus much information on hunting, fishing, wildlife and natural attractions. The booklet sells for \$1.25 postpaid and may be ordered from Thomas H. Knepp, 706 Scott Street, Stroudsburg, Pa.



## Woods, Waters, Wildlife and the Big Payoff

By Steve Szalewicz

**F**ROM late August until November's nights are too cold to permit travel with car windows rolled down, thousands of Pennsylvanians spend many weekend hours cruising back roads in the Big Woods looking for the "green and gold."

Sounds like a treasure hunt? That it is, of a sort.

However, this "green and gold" is the reflection of deer eyes caught in a powerful spotlight. If the search is for a spreading rack to overhang a mantle in a newly-built hunting cabin, the pay-off may not come until some deer season in December.

To redefine a spreading rack—anything over six points is considered a "big" and hard to find in over-browsed woodlands of those parts of Forest and Warren Counties east of the Allegheny River.

But on rare occasions, when only the luckiest of stars are twinkling, the reward to a spotlihter can be immediate. For then a deer may either by instinct or intelligence, perform so amazing a feat that all the gold at Fort Knox and the "green" it represents could not buy a repeat performance.

Of course, it can be assumed that most spotlighters are deer hunters. And their search is purposeful. They want to find where deer are the "mostest and the biggest."

But a good many passengers in a spotlighting caravan never have touched a gun. Shooting at a buck would be the quietest of their ambitions. These people just naturally love to look at wild animals. The more the better. Then again one great American yen today is expressed in motorized travel.



If the late Sunday evening drive can combine a couple hours of spot lighting, plans are made to include such an adventure. Even on Saturday nights when the Allegheny moon hangs in autumn's ripeness, Perry Como is locked in the TV set, while whole hunting and fishing camps turn out to look at deer. Perry can wait until the frosts cover the windshields, and the deer stay back in the pine shelters.

The hunter who spotlights to an extent soon becomes the captain of the deer drive. He is the prophet with some reputation. Up at the Big Buck Camp he may strike a dramatic pose near the crackling fireplace and confidently offer:

"We should put out four bucks on the first drive down Jug Handle Hollow."

The first drive may very well prove him right. How does he do it?

Not by analyzing the hoof prints in the sands along Jug Handle Run. Nor by counting fresh buck rubs along the transmission line right-of-way. The fragrant sassafras no longer grows there. Sprays have

brought a succession of tough sedges and bracken fern.

No, the camp prophet deals with the magic of candlepower. He's illuminated every field and woods edge within ten miles of Big Buck Camp. And since deer are very much habitual in their traveling and feeding rounds, the prophet can and does mark the sightings of outstanding bucks and vantage points in the area.

But of course, outstanding deer do not remain secret long. Should an eight-point buck be caught in a light working on Whig Hill in Forest County, it remains in the spotlight for a major portion of Western Pennsylvania.

It is a pursued animal. Every bulb and battery owned by summer colonists in the long row of cabins at Kelleysville and Mayburg on Tionesta Creek is pointed at its antlers. The "Big Buck," and it is big by today's standards, in overbrowsed ranges, becomes the talk of steelworkers from Pittsburgh to the Beaver Valley to Farrell and Sharon. It is wanted by the Lakers from Erie.

So many hunters want it framed in

**NIGHT FEEDING** deer are a common sight throughout Pennsylvania. Spotlighting them has become great entertainment for camp families. It is illegal to throw any artificial light upon deer if the person deliberately doing so has in possession a firearm or other implement capable of killing the animal.



their scopes, that silent good wishes are offered: May it be spared by the coal trucks roaring on Route 62 during the rutting season. Hope the farmer tolerates its feeding until the gun harvest. And if some outlaw tries to "jacklight" it, may he miss by a country mile.

Deer spotting is top-grade entertainment for camp families in the remote public woodlands of the Allegheny National Forest in Northwestern Pennsylvania.

Very few can appreciate the number of people who enjoy the seclusion of the pines and hemlocks in Forest, Warren, McKean and Elk Counties over any pleasant weekend. The natives at Tionesta remark that the camp owners are hardy people. On winter days when the highways are heavy and slick with snow and ice many Pittsburghers drive 130-150 miles to camp to stash corn into a wildlife feeder.

Hunting camps, old farmhouses, tarpaper and slabwood shacks, school buses, expensive house trailers and even tight-bodied refrigeration trucks have been converted into second "summer homes." It is just as fashionable to have a summer home as it is to have a second automobile. And if a hunting and fishing cabin fills the bill, that's easier on the budget.

Not a few of these camps are elaborate. Concrete block construction is a favorite, with picture windows and white paint aplenty. Why the big investment? Owners remark they hope to live here "when we retire." Do a little hunting and fishing.

Forest County officials say that this county had more than 4,000 camp structures at last count in 1956. The building continues so fast that the assessor admits he is a few cabins behind at each development.

He does not worry. The builder must utilize every hour of his weekend for his construction. Some day when the weather is bad the new property owner will walk into the courthouse to record a deed.

"That's how I know a new camp is going up," says assessor Orin Allio. "Camp people are nice people. I'll take a ride out one day and look at their place. We try to treat them very nice. To encourage them to build nice-looking properties and keep surroundings tidy. Our camp taxes are not high. (average total \$5.00 to \$15.00 per year)."

While other counties are searching for new tax resources, Forest County has found them. Cabin developments are springing up in waste bottomlands and hollows of rock and rotting brush heaps; or on the hillsides, in the redbrush, back from good roads.

Real estate men report that prospective camp-builders and buyers ask questions like these; "How's the turkey and deer hunting? How far to a good trout stream? To the Allegheny River? Can we get close to the Tionesta reservoir? Any spots on top of a hill where the view will be good from a picture window? Any strip mining? We want peace and quiet. One day we'll retire here to hunt and fish and maybe have a little garden."

Lots sell for from \$75 to \$250. Should a spring be found back in the woods, this camp site brings \$1,000 and more immediately. And it is snapped up. Camp builders now bulldoze a pond for fishing, swimming, water supply in case of fire. The lot is graded, seeded, mowed religiously in summer, edged with young pines or spruces and marked with brightly-enameled wagonwheels.

Land which otherwise was non-productive today yields a good tax return. It may be said that every deer and turkey, trout and musky, unpolluted brook, unobstructed view, and lonesome pine spared to silhouette a \$3,000 concrete block cabin, in a way contributes to Forest Counties tax take.

Townships that would tax state hunters heavily by demanding higher contributions on State Game Lands





HUNTING CAMPS range all the way from shacks to mansions. Forest County had more than 4,000 of them at last count and the building boom continues. Most camp owners use them for hunting, fishing and summer vacations as well as prospective places to live after they retire.

should remember that unexpected tax receipts develop from public access to hunting and fishing.

Take Kingsley Township in Forest County: By 1941 when the Tionesta Flood Control Reservoir was completed, this township's real estate was valued at \$97,000 for tax purposes. In less than ten years, new camps and cabins raised the real estate to \$270,000. Perhaps the greatest reason for building in Kingsley is the good fishing of the Tionesta Reservoir. In July of 1956 this reservoir yielded a musky-a-day to fishermen. And these were lunges that were actually seen. Others were spirited away.

Within forty miles of any camp in the Allegheny National Forest then will lie some of the best fishing waters to be found in the Eastern United States. The Allegheny River for smallmouth bass, walleyed pike and tons of soft fish; the Tionesta reservoir offering these, plus perch and muskellunge as a specialty. Besides this the Allegheny National Forest itself offers 500 miles of trout

streams stocked now with 50,000 trout each year. And the stocking in these waters will be heavier. The federal government has authorized construction of a fish hatchery, very probably on federal lands nearby.

But the influx of weekenders from Pittsburgh and Beaver Valley and Ohio is great already. The population of Tionesta and its twin outdoor outpost, Tidioute, on any weekend triples. And so does the business. (Main Street in Tionesta on a Saturday night before a weekend holiday is referred to as Small Liberty Avenue of Pittsburgh.)

The population of Forest County in 1950 was 49,000. But in antlerless deer season, in 1955, in one hour 500 automobiles, averaging three hunters per auto, crossed the Route 62 bridge entering Tionesta. These hunters were en route to the Allegheny National Forest. And Tionesta is but one western gateway. Warren and Tidioute are other popular entries. The population of Forest County on any summer weekend is estimated at 30,000.



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*Groundhog  
Hunters*



# Evolution of a Groundhog Hunter

By M. E. Sherman

**D**URING the late 1920's a steadily rising interest developed in hunting groundhogs with long range rifles. This lowly little animal then became spoken of as the woodchuck or "chuck". Prior to this time only a few persons were ever seen hunting chucks and usually an ordinary 22 caliber rifle or a shotgun was the firearm used for the hunt. Sometimes mass killing was done by several hunters who used dogs to chase the animals out of their dens. Other hunters carried shovels, picks and other equipment for digging their quarry from its safe retreat while still other men resorted to dynamite to blow open rock dens. Many were caught in traps set in holes for it was not unlawful to set traps in holes in those days. The groundhog was then considered a pest by many farmers and country folks. Today we recognize and give the woodchuck a well deserved status as a sporting game animal. It indeed provides the finest kind of shooting with the finest kind of precision rifles and scopes.

About the time this recognition and enthusiasm was developing following World War I in which sniper shooting became quite an art, the manufacturers of firearms began the trend toward developing rifles that fired bullets with less weight and more speed. The rapidly increasing demand for longer range and minimum drop in bullet trajectory had become a universal cry among the shooters.

The 30-06 military rifle used by our armies in the war was then considered the ace of rifles and met the demands of the shooters, but the farmers and country folks did not like its thunderous report around their stock and buildings. Its trajec-

tory had a minimum of drop that proved its efficiency at sniper shooting in the war. Many shooters were developed in the armies, for sharpshooting told heavily in the war. They came home with a penchant to shoot, and the woodchuck provided the ideal target. An outlet for that training and experience in the war was indeed found in the opportunity to shoot in sniper style at woodchucks in peacetime at home.

Military rifles were altered and shaped to sporting style. Less weight and facility of handling was universal. Scopes of that day and sporting slings were attached. The 110 grain bullet had been developed for the 30-06. And so went the shooting and discussions regarding the accuracy of the various weight and size of bullets used.

Woodchuck hunting now truly became a popular sport and a popular subject wherever sportsmen and shooters chanced to meet. Smaller caliber rifles appeared to be on the way. The manufacturers were experimenting as were gunsmiths and riflemen.

Many riflemen took to hand-loading their own bullets as well as those then on the market, and gunsmiths took on to building special rifles. The manufacturers were about to announce new calibers with unheard of velocities and long range in the caliber class. Old tried and true 30-06 appeared to be on its way out as a chuck rifle because of its thunderous roar and heavy recoil. The caliber 270 had come in but was not the kind of a chuck rifle desired. Some shooters used and spoke favorably of the 250-3000, but it never gained a popular following for a chuck hunt-

ing rifle. In came the 22 caliber Hornet which was soon accepted as a splendid chuck and crow rifle. Shortly following was the 220 Swift which astounded the riflemen with its long range and velocity. Sometime following the Swift, Remington announced the 222, a medium range rifle between the Hornet and Swift. Chuck hunters were thrilled. Later came the calibers 243 by Winchester and 244 by Remington. During this period of development I became interested and decided to join the fraternity of woodchuck hunters. My association with the shooters of chucks was almost a must, for the nature of my work found me among them often and at various times. The fascination of the sport grew as I saw and talked with chuck hunters and indulged in the sport. The woodchuck became an interesting little animal as I learned more about hunting and shooting it. Their abundance in those days may be judged by some that I saw in remote places where farmers did not keep them reduced because of crop damage. At one time in Wayne County, Pennsylvania about the year 1924 I saw fourteen popping up their heads from a single vantage point.

While attending a sportsmen's field meet in the early days I was discussing firearms and shooting with a renowned local gun man and good rifleman. Off in the distance he spied a chuck popping up his head from the mound of his hole. He handed me his converted military 30-06, equipped with scope of three or four power, advising that I should assume the prone position and prove whether I could shoot. I did so, for I had talked rather freely about making good shots in Texas with the military rifle at deer and peccaries (wild hogs). I fired and he remarked: "You got him". Our third companion said: "You sure did". I did not venture out the approximate distance of 300 yards to assure myself, nor did they. One can be mistaken in the collapse

of a chuck's body, as I have learned since.

The day was now rapidly approaching that the woodchuck was to be declared a game animal. I was present at the first official conference and discussion, which declared in its favor the offer to the sportsmen and Legislative Body of the State, to have the woodchuck become a game animal in Pennsylvania. I needed a desirable rifle and scope, for the temporizing days were now over, so I pondered whether my limited funds would permit me to procure these precision instruments to truly become a dyed-in-the-wool chuck hunter. I had become a hand loader of ammunition in the meantime. So I armed with a Model 70 Winchester 30-06 and a four power scope. Considerable experimental shooting was indulged in to ascertain more about the flight of bullets. Lead bullets with gas checks and jacketed bullets were fired at targets at various distances. I did very well at chucks, but soon learned full loads in this rifle at the distances desired developed too much recoil, which is a handicap for pin-point shooting at so small a target as a chuck's head 200 yards or more away.

Notwithstanding the fine qualities of the Model 70 Winchester 30-06, I was not satisfied that it was the proper caliber for a chuck rifle. It was a big game rifle so far as I was concerned, and others of the fraternity must have decided so at about the same time. I then resolved to get the much praised Winchester 22 Hornet, Model 43. It proved to be an excellent and accurate little rifle. I shot many chucks anywhere from 75 yards to 150 yards and a few up to 175 yards, using my own home loaded ammunition and using a K-4 Weaver Scope, which then had just come on the market. My first few years with the Hornet, however, was with using a smaller tube scope of four power that was not quite so satisfactory.

As I attained skill I wanted more





range, yet I wanted to keep away from the super dupers that came near the thunderous roar of the 30-06. My experience with farmers cautioned me against the noise of heavy powder charges. Since woodchuck hunting prevails during the period of the year when workmen and stock are in the fields, the farmer is justifiable in his complaint regarding loud reports of firearms. I resolved then to procure the 222 Remington; notwithstanding I had in the meantime also tried out the 257 caliber Remington, which proved excellent with the ten power scope. The 222 Remington does not have much recoil nor disturbing report and is acceptable to many chuck hunters as an ideal rifle. On the other hand, the automobile hunters, who cruise about the country, seem to favor the super dupers which fit generally in the calibers of 220, 243, 244 and 257, for they have the longer range.

My chuck hunting is mostly restricted to foot hunting when and where I have the opportunity to meet the farmer or his workmen, which gives someone on the farm the opportunity to see who I am and what I

am doing. The automobile hunter is a hit and run hunter, who takes pride in covering large territory and making exceptionally long shots, but is not often seen or identified by the farmer. Often his tactics are not accepted favorably by the farmer, for he leaves the carcasses of chucks in many instances lie where they are shot. Rotting chucks lying about where fine dairy herds of cattle meander and where the farmer catches the stench is cause for complaint. It is not unusual for a foot hunter to hear about this, especially if he should be courteous in his approach to the farmer about permission to hunt chucks on his land. The farm lands provide the bulk of the terrain for chuck hunting. Should we ever lose the privilege of access to these lands, our sport of chuck hunting may then become only history.

Some of the do and don'ts that I practice are very helpful toward gaining the friendship of the farmer for the woodchuck hunter. *I always display my current hunting license tag regardless of the clothing I may wear.* I don't eat chucks, but do gather them up and dispose of them at some



waste piece of land on the farm or give them to persons who will use them. Sometimes I believe the farmer is glad to know that another chuck has been killed, as he observes the buzzards hovering over the spot. Large stone piles, swamps, and brush patches are good places. I avoid walking through his grain fields. Care is used in crossing or getting through fences. At wire fences I set or lay my rifle over and roll under the fence by lying on the ground. Otherwise, I follow the fencing until I come to a tree or solid post. My rifle is set over carefully as usual. My crossing is done easily without harm to the fence. Other types of fencing may be crossed with similar care. Some fences have prepared openings that the farmer uses for going about his work. These are used by doing a little extra walking. I generally identify myself to the farmer or some one on the farm. The law requires that we should display our license tag and the farmer deserves to see it.

The woodchuck, after these years of persistent and almost constant hunting, has gotten to be a very shrewd little game animal, as no doubt most chuck hunters now realize. The canny chuck of today is not the common groundhog pest of yester year. The more I hunt the chuck, the more I enjoy to hunt it. I have shot many and have missed many more

than I like to talk about. The misses have, however, brought about their reward for the chuck. Those whining bullets that whizzed by his whiskers developed the crafty shy game animal that we may have good sport shooting at today.

Many years ago, about the time that woodchuck hunting was in the infancy of its modern development, a writer for one of the popular outdoor sporting magazines said as follows: "If you miss your chuck, stay put, he will come up again in about thirty minutes." Perhaps this writer was about right for that day and for inexperienced (non-shot at) chucks of today. You may wait all day for the modern experienced chuck, and then it will not come up, or has provided some way to sneak away without your knowledge. Those shot at several times, old and young, truly become smart. They will cross entire clover fields without exposing themselves and take up in new quarters at holes within several hundred yards proximity. Each chuck usually provides or uses other chuck holes to escape harassment, and a thoroughly frightened chuck may stay in until nightfall before emerging from the retreat. I have found them out at night time feeding on a number of occasions. It is wise to scout the holes occasionally to determine whether they are being used. If any particular hole is being used by a wise old chuck, you are reasonably sure that you may have a shot, if you have the patience to stay with it.

I once kept watch over a hole for quite a bit of time at odd periods, where I knew a shrewd old chuck liked to take up his abode because of the lush feed in the vicinity. I had shot at him several times and others had done likewise. This chuck had become quite a legend among a few chuck hunters. His hole was surrounded by about an acre of briars and brush and some trees. He frequently fed so close to briars and heavy grass that a number of the shots at him had been deflected by



the vegetation, which made him shy and clever. After each hot experience this chuck would generally depart unseen for a few days. He finally became so scary that the thump of one's foot on the earth within more than a hundred yards sent him scurrying to retreat. I learned from my experiences with this one and others that their eyesight and hearing is keen. One Saturday afternoon I took watch at my usual shady concealed shooting post. I saw him in the briars upon my arrival, but had no shot because of the obstructions that would likely deflect my bullet. He sneaked into his hole and stayed there all afternoon. I watched and waited and had about given up hope. The time was closing down to leaving me only about thirty minutes shooting time. Clouds were gathering in the sky and the day was late in August, which was lessening the daylight period. As circumstance indicated that this opportunity may be my last chance to get this wily old chuck, I kept my field glasses constantly on the hole. Finally, I saw a slight movement. His nose came up and slowly inched upward. The light was rapidly fading. Hastily I cut a bush that would conceal my body as I tried to close in the distance between my post and the chuck's hole. I crept forward slowly and carefully, knowing that any false move or sight of man would send this chuck in for keeps. I reduced my distance of approximately 225 yards down to about 175 yards. The chuck at last crept out and sat up a few feet from his hole. Slowly and carefully I dropped my shield bush to the left as to conceal my body all but a little shooting space to the right. My shooting was sitting. I took careful aim in the fading light. The cross hairs of the scope squeezer on his neck. Now I must squeeze that trigger, which I did, and my chuck had fallen at last. I picked him up with some regret, for he had provided me with lots of pleasure and experience.

This chuck was perhaps the largest and heaviest one I ever shot. He was now stone dead, so I carried him back into his sanctum of retreat and placed him not far from his hole with a wish that the chuck may long provide as a game animal in Pennsylvania.

There are many fine sportsmen and good riflemen who indulge in chuck hunting for the pure pleasure of fine rifle shooting. To perpetuate this excellent sport we must constantly remind ourselves that pleasure of this quality is not always easy to come by or hold. It depends on all of us to hold good relationship with the farmer and land owner. The posterity of the sport will then be secure as long as woodchucks can be retained in reasonable numbers. Our attitudes and conduct all the way with the authorities charged with protecting and conserving the wildlife in conjunction with the farmers and land owners, not to destroy them entirely by gas bombing or other measure, but instead to regulate their existence in the spirit of good sportsmanship. We can then enjoy our fine rifles and fine scopes in the fullest measure. In conclusion, it would be a sorry day for the writer of this narrative, should I realize that chucks are *no more*.





# Great Grievs From Broken Glass

By Don Shiner

**E**VERY hunting dog—pointer, setter, hound and retriever—runs a chance of stepping on broken glass while afield. Sometimes the pups are lucky in having the glass cause only a slight scratch. Other times, however, the pads of the feet are deeply lacerated, causing the wind up of the chase for the year. The bad cut takes a long time in healing.

Practically everyone contributes to the great quantities of glass that are discarded in the outdoors. Picnickers, campers, hikers, hunters, in fact everyone who visits the fields and forests lends a hand in littering the countryside with trash. And while it is true this trash mars the scenery, there are far more and deeper complications resulting from this litterbug problem.

Part of the garbage strewn about in the outdoors is composed of paper—soiled paper plates, newspapers, napkins, cups and lunch wrappers. The elements, nature's working force, digest this material and quickly re-

move it from the scene. Part of this littered trash is remnants of food. Wildlife scavengers (opossums, skunks, crows, mice and perhaps an occasional fox and hawk) consume these left-over pieces of food and erase them from the countryside. The metal contents of this scattered trash—tin cans, bottle caps, beverage cans, broken eating utensils and pans—remain on the scene a while longer. But nature triumphs over this discarded material too, by rusting or oxidizing the metals until they pulverize into dust and re-enter the soil.

But that part of the trash made of glass remains on the scene for decades and causes the greatest grievance. Glass is almost indestructible. Nature's most powerful elements—wind, rain, frost and sun, have no effect on these fused silicates. Invariably the glass bottles and containers become broken and present hidden hazards for years to all outdoor participants.

Falling leaves soon cover and ob-



secure the razor sharp pieces of glass. Bare foot youngsters romping in the area frequently acquire deep and serious cuts from the pieces of broken glass. Pity too the hounds who, in their eagerness to trail down bunnies, drop their paws on jagged pieces of glass scattered among the leaves. There's a whimper of pain spoken as the razor edge cuts through the soft pads and slices into one or more toes. When this happens, it's the end of the hunting season for that year for both the dog and its owner.

Curved neck and bottom pieces of bottles are potential magnifying lens, capable of focusing the sun's rays into tiny pin points which quickly generate heat of kindling temperatures. Suddenly, with the help of a slight breeze, flames leap upward to engulf the trees and send the whole region (including the wildlife) up into black smoke. Long after the fire has been put out, the broken glass remains ready to kindle another flame when the sun and vegetation are in suitable condition. The hazard to youngsters and hounds also continues.

Practically the same hazards exist when bottles and glass articles are broken and scattered over a stream bottom. Plinking .22 caliber shorts at



bottles floating in rivers provides sport, but it presents serious problems to bathers and those who wade in the water.

All this points out quite clearly that glass is one big item in the litter-bug problem that has serious complications. Paper, metal cans and garbage scattered about in the fields are real eye sores. In time, however, nature heals these wounds. But glass remnants of trash remain untouched for years, to plague man, dog and wildlife.







# Old Betsy

By John B. ("Jack") Miller

**I** GAVE the knob on the developing tank another twist to stir the "soup" and wandered out of my basement darkroom to my workbench while waiting for the chemical to work. There, leaning against the tool rack, where it had stood for the many years since we had moved to this home, was the first man-sized firearm I ever used.

A heavy coating of dust and lint had collected on it, for I'm too lazy to clean up my shop very often. I picked up a rag and gave it an idle wipe or two. Just for all times' sake I cocked the big muzzle-loader, put an empty twenty-two cartridge on the nipple to take the hammer blow,

and reached for the trigger. At the first slight touch of my finger the hammer fell with a healthy snap, so I recocked it and tried again, finally realizing that here was a real "hair trigger" which I didn't recall as being that touchy in the old days.

No, I didn't forget about the film that was developing. But I did start digging into the "innards" of the old weapon and, before I realized it, I had spent several pleasant and interesting hours tinkering and remembering those days long gone.

The mechanical work required was crude and simple. I drilled out and replaced a broken pin. Likewise a broken screw. I made another screw



to replace one so badly worn it would not stay in place. I shaped up the sear and the notches in the hammer mechanism until they engaged squarely and solidly. I unscrewed the breech plug and the nipple and cleaned out the accumulated rust and dirt. I wiped out the long barrel and discovered that the wide lands and grooves were still visible. I put it together and once more snapped it at the calendar girl on the darkroom door. As I did so I wondered if the big buck that had fallen before my custom Springfield three days before would have been dead had I been using this old piece. He should have been, for it was a standing shot at only seventy yards or so, and that fifty-eight-caliber ball from the old pumpkin slinger certainly would have laid him low had it hit him where the 180-grain Sierra did. But could I have hit him with it? I suppose it would make a better story if I claimed I loaded it up and shot a four-inch group at one hundred yards, but I didn't do it and I'm trying to stick pretty close to the truth. And so my mind wandered back to the days nearly fifty years ago when I first used that old musket.

We called the old smoke pole a "Civil War musket" and I guess that was about right. The only identifying mark is the designation "U.S. Norwich" on the lockplate. The barrel is a healthy thirty-nine-and-a-half inches long and I suspect a half inch or so has been removed in days gone by. Some ancient tinker "sporterized" it by sawing off the military fore-end three inches or so ahead of the rear barrel band. A makeshift ramrod guide has been fastened to the barrel a foot back from the muzzle, holding the hickory ramrod in place. (The ramrod has gone away somewhere and I'll have to make another if I decide to shoot the old gun.) I don't know whether or not the dull red paint on the stock was GI, but some of it remains. Prob-

ably any antique firearms nut could identify it in a moment, but I have trouble enough shooting my modern pets well.

It isn't much to look at now, but in 1911 it was the apple of my eye. As I worked on it there in my shop I compared it mentally with my free rifles and scope-sighted sporters. Next I brought it out of the basement and put those guns side by side. In the old days I dreamed of hunting big game in the far places and now I wonder if the dreaming wasn't as much fun as was the actual hunting I did in Wyoming last fall.

I remember the woodchucks I stalked in the stony fields and steep, brush-spotted, pastures. I didn't get them with the three hundred yard shots I like to make with the .22-250 these days. I sneaked up within ten feet or so of the hole and waited for an inquisitive nose to appear, after which I aimed, shut my eyes, and gave a prodigious yank.

My dad was neither a hunter or a rifleman and all his time and energy were expended in wresting a living from those hilly acres. Since I was the first child and had nearly cost my mother her life when I was born, I had no brothers to coach me. It was not until a hunting "hired man" arrived at our house that I was told that a trigger should be squeezed, not jerked. (Sometimes I wonder if I have really learned that lesson yet!) Practically all I learned about shooting at that stage was by trial and error, and I sure tried and erred plenty. It's a wonder I didn't blow my fool head off. If I saw a boy of ten or eleven fooling with such a thing today most likely I'd yell for the cops and take to the hills.

Aside from the woodchucks, there were other interesting things to use the musket for. A handful of bird-shot on top of a wadded-up page from Sears & Roebuck's bible, filched from the two-holer at the end of the path, coupled with an indeterminate



amount of powder, produced a most satisfying roar and sometimes killed some of the pigeons that persisted in messing up the beams in the old hay loft. I didn't set the barn afire, but I'll never know why.

I learned that a dose of dry beans or gravel, ahead of even a light charge of powder, would account for a rat that sneaked around the chicken yard to swipe some grain or perhaps get away with a baby chick. At least, if the range was fifteen feet or so, it would knock him out until I could jump on him or lambaste him with a club.

One neighbor, not the bear hunting one, had a vile tempered bull that persisted in jumping the pasture fence and invading our premises. Once my big shepherd dog, Rover, laid him flat on his back with a nose hold when the old devil jumped the fence and took after me as I was on my way to the country school I attended. Another time Dad popped him in the stern with his little thirty-two caliber Harrington and Richardson revolver, after being chased right up on the front porch by the old beast. Once I rammed him right back through his pasture fence when the favorite horse I was riding while chasing the bull home objected to the whip I swung, crashed into the culprit with his chest, and really sent him flying. Finally, one day, I loaded Old Betsy with a dose of rock salt and let him have it at fairly close range. I don't remember whether or not he ever came back, but if his owner had butchered him shortly afterward he wouldn't have needed salt on his round steak.

Some very unorthodox loads found their way into the old warrior. I recall a couple of times that I rammed in charges I didn't dare shoot out. The only solution I knew was to tie it fast to the old crab apple tree and let it off with the aid of a long string. The fact that it's still in one piece speaks well for the



soundness of its original construction. To my now farsighted but critical eye it looks as though the barrel is a bit crooked, and probably it was in the old days, but I never worried about that.

An old Flobert twenty-two rifle had lain around in the back room from the time I could first remember. Some earlier user had gotten a bullet stuck in the barrel and, since the extractor was broken and the bullet prevented poking the empty cartridge out from the muzzle end, it was well anchored in the chamber. Apparently it was considered a safe toy for a youngster, so I was allowed to use it in my frequent battles with Indians and bad men. By the time I was ten I had contrived, by some stroke of youthful genius, to remove both the obstructions. Then I persuaded my father to have a local character that doubled as a gunsmith fashion an extractor of sorts. While it didn't really extract the empty, it did support the lower half of the rear end of the case and also made it possible to get behind the case rim with a knife blade and finish the removal process.

Those who struggled with the cleaning of twenty-two caliber rifles before the advent of non-corrosive priming can visualize the sad condi-

tion of the bore. In spite of that it set off the shorts of the day, which I was able to buy in those times for fifteen cents a box,—if I had the fifteen cents—with a noticeable report. Sometimes I could even collect one of the black or grey squirrels that raced through the big sugar maples around the house if I could get close enough.

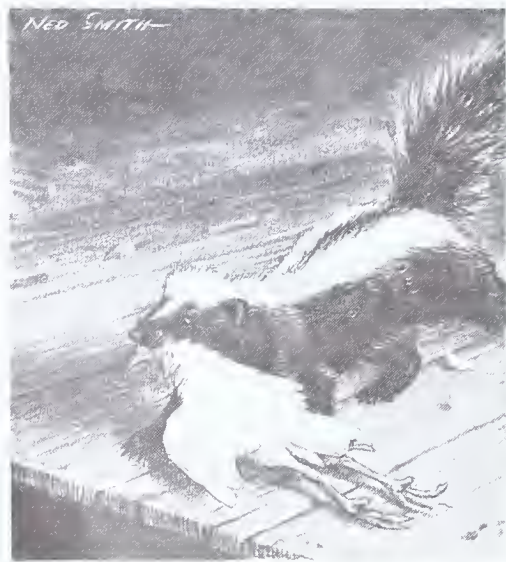
The Flobert satisfied me for a year or so but before long I felt the need of bigger artillery. That's when I really made the acquaintance of Old Betsy. It was a little after this that I took the Flobert for an afternoon walk in a neighboring woodlot. Pussyfooting for a varmint behind every tree, I spied a form in the hollow in the base of an old beech. My active imagination put eyes and ears on it and I was sure it was the head of some huge and fearful animal. Raising the rusty Flobert I took aim and fired. Nothing happened, and I fumbled to pry out the empty cartridge and load again, all the time eyeing the hole in the tree and seeing more frightening details. The little rifle went "ping" again and still no action other than a doubling of my trembling rate. Once more I pried out the hull and loaded up, looking backward for an escape route as well. When the gun cracked that time and still nothing happened I tarried no longer but, convinced it

was indeed something far too big for my armament, took off for home as though the devil himself was after me.

I told no one of my defeat in the woodlot, but with the dawn of the next day my courage returned. Stuffing a man-sized charge of powder and a round ball into Old Betsy, I put a cap on the nipple and advanced to the scene of my recent rout. Look as I would, I couldn't see the cause of my terror, although I had no great trouble finding the tree. In moments of calmer reflection I have decided it was merely a play of light and shadow on the rotten wood in the base of the tree. Or perhaps it was a big old cotton-tail partly concealed there and not at all disturbed by my erratic shooting. I suspect the charge Old Betsy carried that day was one of those disposed of via the crab apple tree.

In another year or so a hired man came to our house who had a single-barrel, twelve-gauge shotgun. The extractor spring was so tired it functioned only occasionally, the front sight was missing, and the barrel had been cut off until the choke was missing also. In spite of all that, Dad finally swapped his little revolver for the masterpiece and I had a "britch-loader." From that time on, whenever I could afford shells for it, it was my companion on most of my forays. What it lacked in effective range it made up for in width of pattern when a grouse got up in the underbrush and I frequently was able to peer around the cloud of black powder smoke and discover I had actually put meat on the table. Only when no twelve-gauge shells were available did I fall back on Old Betsy.

One episode involving the shotgun might be worth relating. In order to supplement the meager income from the farm, my father owned and operated a hay press. Each fall, after the threshing was





over, he would take the press around the neighborhood to bale the hay the farmers wanted to sell to the lumbermen removing the virgin hemlock from the nearby forests. He might be away from home several days at a time for, when working ten or twelve hours a day on the press, neither men nor horses were inclined to travel several miles night and morning as well. On such occasions my mother and I were left alone to keep the place and do the chores.

That fall an old hen had "stolen her nest" and came off with a late brood of chicks. For some reason these were designated as my property. They were housed in a fair sized coop which butted against the back of the woodshed and had a door on each side. On one of those nights when Dad was away, and after Mother and I had gone to bed, we heard a distressed squawking coming from the chicken coop. That was before we had flashlights, so Mother lighted an oil lantern while I loaded the shotgun and we sallied forth to the rescue.

Arriving at the coop, Mother held the lantern where the light could shine inside, while I peered over the shotgun barrel. There he was, the villian with the black coat and the white stripes, and he had one of my chickens in his mouth. Without waiting for encouragement, I blazed away and succeeded only in blowing to bits another chicken that was wandering around beyond the skunk. Back to the house I dashed for another shell, my night shirt flopping around me in the frosty air. Armed again, I returned in time to see the black robber emerging from one door of the coop with my chicken still clamped in his jaws. Again I fired, from a distance of eight or ten feet, and that time I managed to "save" the victim by shooting it right out of the grasp of the bandit, who backed into the coop again.



OLD BETSY being held in the left hand is compared by the author with one of his modern free rifles.

And so Old Betsy sort of passed out of my mind. I've explained her operation to some of my boys, and recounted some of the happenings just outlined for their benefit. I've taught them to handle guns safely and shoot properly. The oldest is fast becoming a top notch competition rifleman and all have learned to handload modern ammunition. But they never heard the "snap-boom" of a percussion lock gun, felt the push of the broad old butt, or saw and smelled the rolling cloud of grey smoke emerging from the muzzle of Old Betsy. I have been wondering, as I worked over that old musket, and as I pecked out these lines, if they haven't missed something very real by living in a town and in this modern age. Next time we're all together I think we'll fire a few shots out of her, just to educate them.

I'm glad I wandered over to the bench while the film was developing.



### Five For Five

**MONTOUR COUNTY**—On May 20, contrary to the popular theory that Canada Geese do not mate until they are three years old, a two-year-old goose that had nested just outside my window hatched "5 for 5" and is now doing a good job of raising them. We have four other geese here and they have teamed up with her and they all seem just as pleased with them as the mother.—District Game Protector George Dieffenderfer, Danville.

### Quintuplets

**LYCOMING COUNTY**—On June 2, while travelling along a back road in Mill Creek Township, a bear crossed in front of me. I stopped when I saw a cub come out on the road, then another cub came out and following close behind were three more cubs. This is the first time that I have ever seen a bear with five cubs. I have often seen three. These cubs were all pretty small. I would say they didn't weigh over 7 or 8 pounds each. The mother was not a very large bear, probably around 150 pounds.—District Game Protector Robert Sinsabaugh, Hughesville.



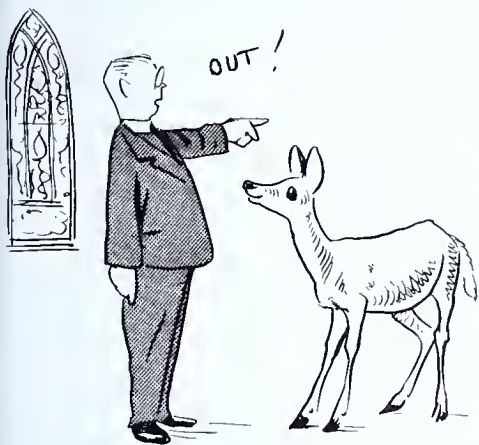
### Beating The Heat

**BUCKS COUNTY**—On May 20th while standing on the bridge crossing the spillway at Lake Warren, Bucks County, I happened to see, out of the corner of my eye, a movement on the breast of the dam. A groundhog was nonchalantly walking along the path worn on the breastwork, directly toward me. When he came to the bridge, he turned and proceeded to the edge of the water. He reached out as far as he could and apparently not satisfied he sampled the water at several other places. Finally he came back to the original place and plunged headlong into the water. He swam along the shore a short distance then made a beeline for the opposite shore some 100 yards away. When he reached the shore, he scampered out of the water and out of sight. Perhaps his afternoon swim was perpetuated by the fact that it was a very hot and humid day. If the place would be fit to swim in I would have been tempted to take a swim also.—District Game Protector Alfred Graver, Quakertown.

### Split Second Timing

**NORTHEAST DIVISION**—While working on Game Lands I saw a Coopers Hawk dive toward a small robin which was feeding on the ground. The robin, seeing the danger, flew away a split second before the hawk would have hit him. Instead of pulling out of his dive, the hawk hit the ground head first bounding a foot off the ground and then lying still with a broken neck. This type of bird, protected because of its so-called good habits, should have stuck to beetles, bugs and insects.—Land Manager William Fulmer, Bloomsburg.





### Mary Had A Little Fawn

**MONTGOMERY COUNTY**—Mary had a little deer, it followed her to church one day . . . The story as told to me by a resident of Huntingdon Valley happened this way. One Sunday morning as the people of Huntingdon Valley were on their way to honor the Sabbath, a very friendly deer approached from a nearby woodlot. Of the many people going to Sunday Morning Services, the deer (a yearling) chose to follow a girl by the name of Mary. It followed her directly into church and prepared to stay for the entire services. It took one hour of persuasion by means of apples, corn, lettuce and celery to remove our hero from the church. Since this usually quiet Sunday morning our friend has since returned to the peacefulness of the wild.—District Game Protector Edward Sherlinski, North Wales.

### Peacock Charlie

**SOUTHEAST DIVISION** — For about 3 weeks in the latter part of April and early May, we had a daily visitor at the headquarters building on State Game Land No. 196 near Sellersville. The Food and Cover Corp men reported seeing a peacock near the building one morning. They soon learned that the bird belonged to a farmer living several miles away

and that the bird's name was "Charlie." According to the owner, the bird could be picked up readily, if seen, merely by calling its name. However, by the time "Charlie" showed up at the Game Lands, he must have had a loss of memory. We tried a few times to corner him in thick release cutting areas hoping to trap him in the mass of tree tops and brush. However, when the men got too close, he would fly out without the least bit of trouble. We soon decided that "Charlie's" beautiful plumage added a certain something to the general appearance of the Game Lands.—Land Manager Edwin Flexer, Quakertown.

### Broken Firing Pin

**CENTRE COUNTY**—While on a field trip on SGL No. 33 in Centre County, with part of the Philipsburg-Osceola Area High School Biology class, several of the boys spotted a skunk in one of the food plots and gave chase. The old stinker's face evidently got red when his gun would not fire, as one of the students got to within six feet of him. You could see him take aim, jerk the trigger several times and when nothing happened, leave the field in disgust. Evidently he forgot to load his gun or the primer went bad.—District Game Protector Michael Grabany, Philipsburg.





### Mutton Stew

**LANCASTER COUNTY**—On the morning of May 11th, after I had left my headquarters, my wife received a phone call from the State Police barracks and stated a Philadelphia motorist was in the barracks and reported that he killed a deer a few hundred yards down the highway. My wife was unable to contact me and started to try and locate a Deputy. Finally after 45 minutes of phoning she did get in touch with a Deputy and asked him to take care of the carcass. While the Deputy was on his way to do the job my wife received another call from the State Police and advised her the motorist was in error, it happened to be a sheep that he killed. I hope this motorist does not apply for a hunting license and go deer hunting.—District Game Protector Wallace Woodring, Ephrata.

### Duck Trap

**BUCKS COUNTY**—On May 19, 1959 two men were requested by New Britain residents to be careful not to disturb a setting mallard duck which was nesting near their job. This very reasonable request was ignored and the men, when sure no one was watching, caught the hen and broke her neck.

Fortunately, the act was witnessed by two residents of the area who lost little time in reporting the incident to Deputy W. V. Rouse of Doylestown.

Rouse was equally speedy in collaring the killers and seeing that justice was done.

For killing a wild duck in close season and wantonly interfering with the nest of a game bird, each man was penalized \$60.00 and cost of prosecution.

On the happy side, eleven of the thirteen eggs were hatched, by artificial means, a week later.—District Game Protector William Lockett, Doylestown.

### Who's Afraid?

**CENTRE COUNTY**—During the winter I had a number of complaints of people who were disturbing a mother bear and her three cubs in the State College area. Pictures were snapped from a distance of 10 or 12 feet and one report mentioned that a party had lifted the leg of the mother to see the cubs. The other day I was rather surprised by several questions that were asked in earnest—a complete reversal from winter. “Would that mother bear and her cubs still be in the area?” “Would it be safe to take a hike in the area?” and “Where did she go?”—District Game Protector Charles Laird, Pleasant Gap.

### Chipmunk Song

**BLAIR COUNTY**—I have had a great many different complaints in my short career with the Commission but I think that the most unusual one happened the other day when a lady called me to remove a nest of chipmunks from under the patio. She was going to have a dance and she thought they would disturb the guests. The complainant lived close and I happened to be passing her home quite often so I stopped. I found that the nest was not under the patio but in the ceiling of a very modern home. I of course told the lady that she should retain the services of an exterminator.—District Game Protector Russell Meyer, Altoona.



### Game Protector

**LACKAWANNA COUNTY**—Deputy Game Protector Gretkowski related this unusual incident to me. He was making a foot patrol in Jefferson Township when he stopped in the shade to take a break and get out of the sun. While resting there he noticed a groundhog walking directly toward him. The groundhog proceeded right up next to him and sniffed at the calf of his leg. While the deputy remained motionless the groundhog shuffled off. Seems to me the groundhog must have thought: that's a game protector there, no sense fearing him!!—District Game Protector John Altmiller, Clarks Summit.

### Half Shot

**LUZERNE COUNTY**—This experience was revealed to me by a mother and son at my home one night. In our neighborhood, people were all complaining about the dogs that used to raid all the garbage cans at night and early in the morning. One day the father bought his son a B.B. gun thinking that maybe they could scare the dogs with this gun. One day the son saw this dog come in his yard and stand under the bathroom window. He rushed in and grabbed his B.B. gun, opened the window and shoved the gun barrel out the window ready to fire. While he was aiming at the dog he heard something rolling down the gun barrel and the dog looked up at him in shock because nothing happened. While the boy was aiming at the dog the B.B. rolled out of the gun barrel and hit in front of the dog making the dog look up at him and thinking I fooled you this time.—District Game Protector Edward Gdosky, Dallas.

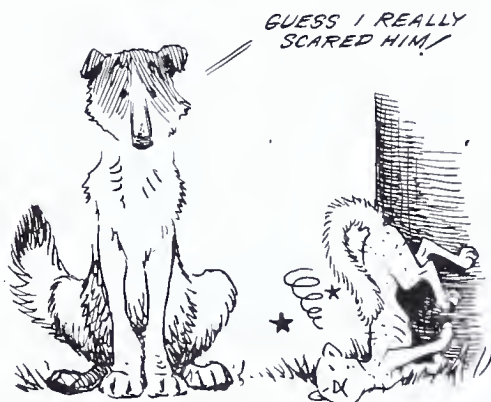
### Polar Bear

**CLINTON COUNTY**—On the evening of the 14th of May while coming down the road next to the Susquehanna River, I rounded a corner and spotted something in the river. Upon getting closer it turned

out to be a bear of nice size swimming. When it came nearly to the shore it spotted the cars and turned and swam back from where it had come.—District Game Protector Ivan Dodd, Lock Haven.

### Nine Lives Not Enough

**HUNTINGDON COUNTY**—I was told of the following incident which had occurred at the home of a friend in Huntingdon County on or about May 15, 1959. Friend's home is a sanctuary to a variety of birds due to the many Norway and Blue Spruce surrounding the house. A pair of cardinals had constructed a nest near one of his picture windows and were in the process of hatching when tragedy struck. A "stray" tomcat made a midnight snack of the female bird. Highly perturbed, my friend decided to let Old Shep loose the following night in hopes that Tom would be chased away. Sure enough, Tom returned the following night for Mr. Cardinal only to meet Shep, who chased him up the nearest light pole. Tom made a fatal mistake this misty night and contacted 1600 volts of "juice." Shep was apparently dumbfounded and just stood his ground and barked when Tom hit the ground because this was the first dead hairless cat he had ever seen. (The electricity had burned all the hair from the cat but his tail.)—District Game Protector Richard Furry, Huntingdon.



### Coal Bed

**SOUTHCENTRAL DIVISION**—Mr. Calvin Witmer, owner and operator of a feed mill and coal yard near Selinsgrove, Snyder County reported to me a rather unusual place for a pheasant hen to build a nest. For the last few weeks she has been nesting on the top of one of the coal piles that is close to the mill, a public road and the Pennsylvania Railroad. They report she seems to be contented and has not been molested in the least.—Land Manager Raymond Holtzapple, Middleburg.

### Fire's Toll

**SOUTHEAST DIVISION**—The terrible toll of wildlife caused by forest fires was emphasized to a group of fire fighters led by Deputy Game Protector Ward Dissinger while fighting a 600 acre fire on the Broad Mountain last May. They spotted a ruffed grouse setting on a nest that was in the path of the fire. The nest was beside a small pine tree so to insure her a small margin of safety the men quickly raked a fire lane around the tree and the nest and backfired the area outside of the fire lane. Later after the main fire was extinguished and when the men were on their way out for the fire they looked and the mother grouse was still safe and on her nest within the small island of cover provided by the quick thinking fire fighters. Estimates run as high as a possible 300 to 400 nests

and grouse destroyed in this fire as this was one of the best grouse covers within the county. Several burned over nest were observed by these fire fighters.—Land Manager Ralph Shank, Pine Grove.

### Beauty Was A Beast

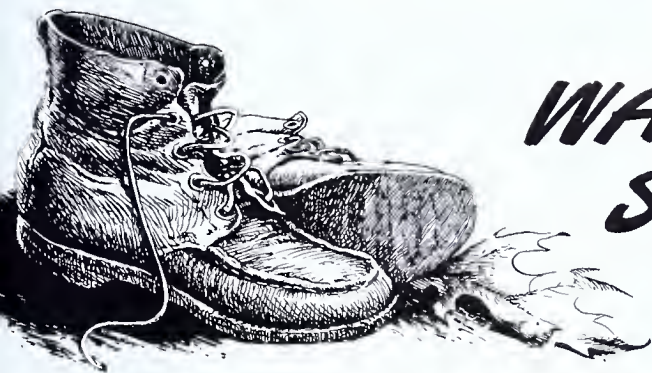
**PERRY COUNTY**—On Friday, May 15, I received a call from a woman at Millerstown R. D. that someone had shot at a pheasant near her beauty parlor and had caused the pheasant to fly thru her window. Upon investigating we found that no shot had been fired but the loud crash that she had heard was made when the bird had hit the window causing the window and the bird to disintegrate and cover her business establishment and two women customers with blood, feathers and glass. This is not a recommended beauty treatment and did very little to improve the appearances of the ladies involved.—District Game Protector James Moyle, Blain.

### Farm Game Cooperation

**FAYETTE COUNTY**—In May 1959, Deputy Wendell Pike of Smock R.D. notified me he had inquiries from the Brownsville Sportsmen's Club about the Game Commission's Farm-Game Program. Deputy Pike is well versed on the subject and on his own time met several times with the officers of the club. It wasn't long until Farm-Game Manager Delmer Garee was dispatched to contact the officers with a sample agreement form to be executed by farmers. On May 31, 1959, I met with the officers of the club and was told the membership voted unanimously by consent of the landowners to null and void agreements held by the club containing 4000 acres of closed hunting lands. The club officers are assisting Farm-Game Manager Garee signing up the farms to add 4000 acres to FGP No. 147 in Fayette County.—District Game Protector A. J. Ziros, Connellsville.







# WALKIN' SHOES

By NED SMITH



## Flowering Weeds of the Roadside

1. For what purpose is the root of the chicory used?
2. Why is the bouncing bet called "soapwort"?
3. What is another common name for toadflax?
4. The evening primrose is not generally open during the daylight hours. How is it pollinated?
5. What close relative of the hedge bindweed is a well-known garden flower?
6. From what affliction does the juice of the jewelweed offer a measure of relief?
7. The structure of the flower and other characteristics reveal that the butterflyweed is just a glorified member of what family?
8. How are the seeds of the jewelweed distributed?

**I**F weeds are plants that grow three times as fast as our lima beans and delphiniums, then we've certainly got a lot of them. From a practical point of view they are a contemptable lot, growing where we don't want them, and mocking our gardening failures with their own fecundity.

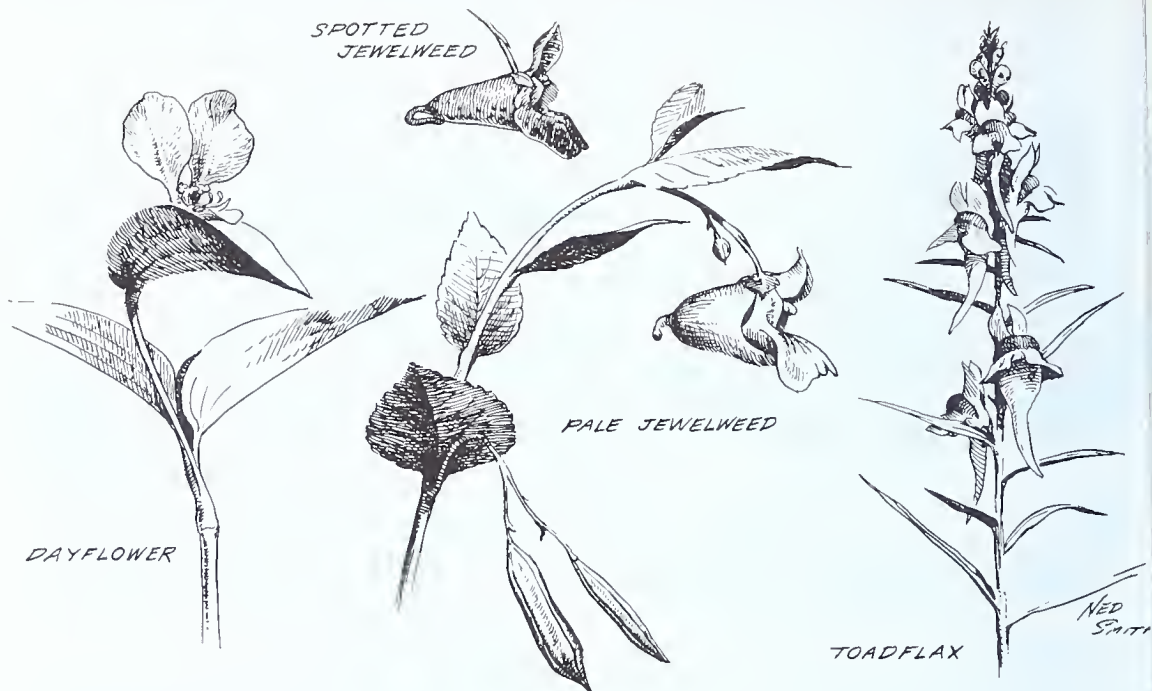
A true outdoorsman is never to practical, though, and if we can forget our prejudices and view them as we would any other wild flower with a better reputation we'll surely discover that many of them are strikingly beautiful. Who can deny that a field of yellow goldenrod is a pretty

sight? Even the harrassed farmer will admit that, though he'll invariably do so grudgingly. Take a close look at the wild carrot. Weed it might be, but few cultivated flowers can match its lacy whiteness.

In late summer and early autumn the flowers of the field and meadow really come into their own. Fertile acres are engulfed in a sea of asters. In the lowland pastures the rich purple ironweeds and pink Joe-Pye weeds stand as tall as a man. Boneset and wild carrots sprinkle the sun-parched green with white, and the goldenrod's glow appears everywhere.

Another group of plants seems to prefer roadside situations, and many of the prettiest so-called weeds can be enjoyed on a leisurely stroll along country lanes. Take time to look at them closely. You'll surely discover unsuspected beauty in these plants whose only "fault" is that of thriving without benefit of man's permission or helping hand.

**1. Dayflower**—This common native plant forms dense stands in fertile soil, particularly in moist places where there is partial shade. The stem is often quite crooked and sometimes reclining. Cupped in a leaf-like green bract you will find the flower, an attractive arrangement of two rounded delicate blue petals surmounting the bright yellow sepals. A third petal, tiny and colorless, is



barely distinguishable on the under-side of the flower.

This plant is well-named, for the fragile blooms last but one day, withering in the heat of their first afternoon.

**2. Pale Jewelweed**—In shady places where the soil is rich you will find extensive patches of this plant with its distinctive pale gray-green foliage and glassy stems. When crushed, the latter yield a juice that is known for its soothing effect on ivy poisoning or the itching rash caused by nettles.

The strangely formed shiny lemon-yellow flower is distinctive. It has a prominent, overhanging lip, brown-spotted throat, and terminates in a curved spur.

A common relative, the spotted jewelweed, grows along moist ditches and small streams. Its flowers are orange, heavily spotted with rusty red, and are smaller in size than those of the pale species.

The seeds of the jewelweed are distributed in an interesting manner. The sides of the pod are grooved and so constructed that the divisions coil like a watchspring when not secured at both ends. When the seeds are ripe one end of the pod is released. The pod splits and coils with

such force that the core of the pod is torn from the plant and the seeds hurled a considerable distance.

**3. Toadflax**—This colorful introduced weed is ever popular with children, who love to squeeze the sides of the blossom to make it "open its mouth." They generally know it by the more pleasing name, "butter-and-eggs." The toadflax thrives in dry, thin soil along our country roads. Its leaves are narrow, gray-green in color. The flowers, borne on a spike, are yellow in color, with an orange "lower lip." Each has a long spur at its base.

The tightly closed corolla is designed to keep out ants and other insects that do not aid pollination. The lumbering bumblebee, on the other hand, has the weight to spring open the "mouth."

**4. Chicory**—This immigrant plant is living proof that the most despised weeds can bear the loveliest flowers. Few more highly regarded plants can match the flawless blue of the chicory. The plant itself is generally crooked, branched, and "stemmy." The flowers are closely attached to the stem at intervals.

The chicory is one of our more useful "weeds." Its large tap root,



when roasted and ground, has long been used as an adulterant (or flavorful addition, according to your taste) to coffee. The early spring leaves, or better still, those forced in a cellar or other dark place during the winter, find ready acceptance as table greens in some parts of our country and in much of Europe. In the sense that it can be a quite useful plant, the chicory doesn't exactly measure up to being a weed, but in the eyes of many its ability to grow in the most inhospitable places, and the difficulty with which it is eradicated more than counterbalance its good qualities.

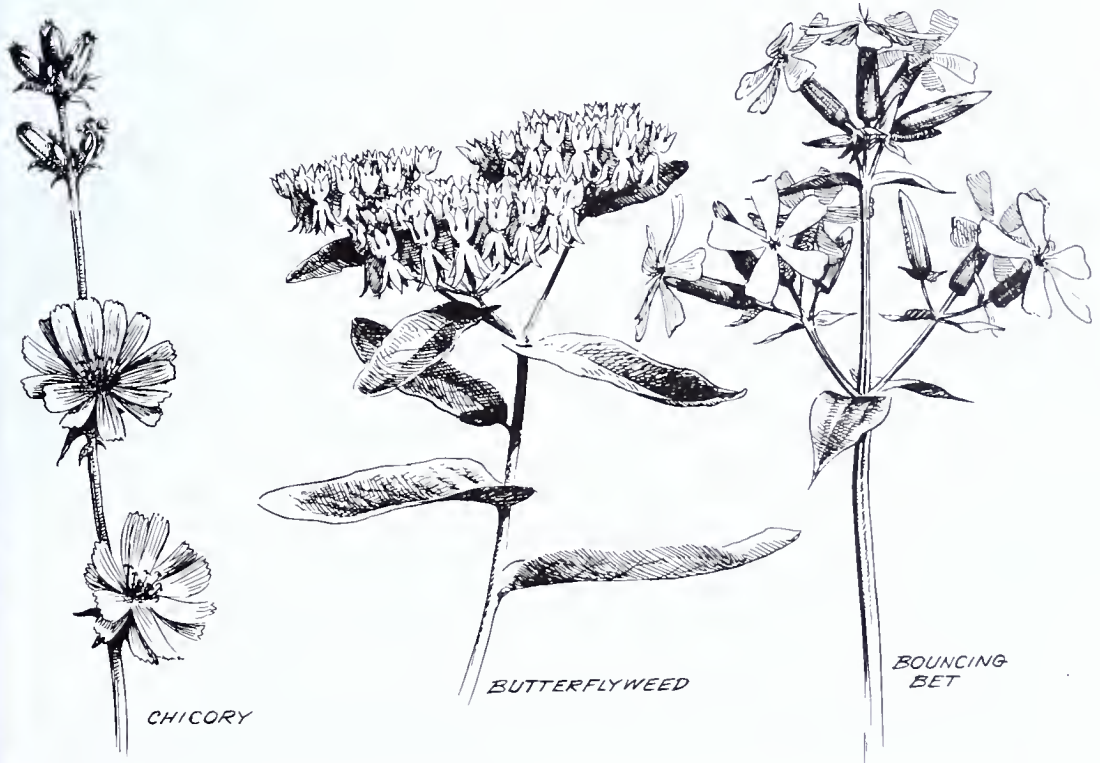
**5. Bouncing Bet**—Originally a pampered favorite in the gardens of European colonists in America, Bet has since left home and struck out on her own. That she has done all right is certain, for her white or pink blooms can be seen in waste places all over the state. Fortunately, Bet settled where she could do the most good, and her beauty is a welcome coverlet

for such eyesores as railroad banks and the like.

Bouncing Bet frequently grows in pure and extensive stands. The plants reach a height of two feet, the flowers borne in clusters at the top. Early settlers called it soapwort, in allusion to the lather that could be formed by crushing the plant in water.

**6. Butterflyweed**—A patch of brilliant orange in a setting of green roadside grass is apt to be a butterflyweed. Few wild flowers exhibit the intense coloring worn by this plant. Examination of the individual flowers will reveal that the butterflyweed is nothing more than an elegant brother of the common milkweed, so plentiful in lowland meadows. Aside from the color of the flowers it differs from the latter in bearing the blooms in flat-topped terminal clusters, its branching form and narrower leaves. As might be supposed, it was named for the host of butterflies that stop to sample its nectar.

**7. Evening Primrose**—The casual ob-





server, seeing this plant for the first time, would immediately conclude that its blooming season had passed a day or two previous. The only visible flowers are generally faded and withered. Were he to visit the primrose again in the evening he would find that some of the inconspicuous buds had fully unfolded, revealing a pretty yellow flower an inch or two across. Next day these new flowers, too, will be withered, but the following evening a few more in the spike will bloom. Because of this peculiarity, those insects working the day shift have no part in pollinating the evening primrose. That task falls to the night-flying sphinx moths. Later in the season, though, blooms can be found fully opened at all hours of the day.

**8. Hedge Bindweed**—Perhaps this plant is best known by the name "wild morning-glory." It is a close relative of the cultivated morning glory, sharing such features as a trumpet-shaped flower, strangely twisted buds, and entwining stalk. The flowers are white or pink. The vine is an enthusiastic grower, spreading over the ground, climbing up fences and other plants, and attaining a respectable length of up to ten feet. Once established it is a difficult plant to get rid of, and the most con-

firmed lover of wild flowers must admit it is a weed in every sense of the word.

**9. Moth Mullein**—Like so many of our weeds, the moth mullein was introduced from Europe many years ago. Unlike many of them, it is seldom really a nuisance, being content to grow in abandoned fields and along country roadsides. Commonly several feet tall, it stands stiffly erect, wearing on the upper part of its stem a scattered spike of flowers. The blooms are generally yellow, sometimes white tinged with pink. The center of each is smudged with rusty or purple hairs and orange anthers.

#### ANSWERS TO THE QUESTIONS

1. It is ground, roasted, and added to coffee.
2. Because of the lather that can be produced by crushing the plant and agitating it in water.
3. Butter-and-eggs.
4. It is pollinated by sphinx moths that are abroad at night.
5. Morning glory.
6. Ivy poisoning, as well as the itch produced by nettles.
7. The milkweed family.
8. They are "shot" by the recoiling pod segments when the latter are suddenly detached from the plant.





## GAME COMMISSION SETS 1959 HUNTING-TRAPPING SEASONS; ADEQUATE DEER HARVEST AIM OF THREE SEPARATE SEASONS

The Pennsylvania Game Commission met in Harrisburg on July 1 and established the seasons and bag limits for resident game and furbearers for the 1959 hunting license year which begins September 1. The seasons and limits follow:

Daily Limit	Season Limit	SPECIES	DATES OF OPEN SEASONS	
			First Day	Last Day
2	8	Ruffed Grouse .....	Oct. 31	Nov. 28
4	12	Quail, Bobwhite .....	Oct. 31	Nov. 28
1	1	Wild Turkey (See Below. Certain counties closed.)	Oct. 31	Nov. 21
2	8	Ringneck Pheasants (Male only) .....	Oct. 31	Nov. 28
4	20	Rabbits, Cottontail .....	Oct. 31	Nov. 28
		and .....	Dec. 26	Jan. 2, '60
6	30	Squirrels—Gray, Black and Fox (Combined) ....	Oct. 31	Nov. 28
Unlimited		Squirrels, Red .....	Closed Oct. 1 to Oct. 30	
2	6	Hares (Snowshoe Rabbits) .....	Dec. 26	Jan. 2, '60
Unlimited		Grackles (Bronze and Purple) .....	No Close Season	
Unlimited		Raccoons (Hunting or Trapping) .....	No Close Season	
Unlimited		Woodchucks (Groundhogs) (1959-60) .....	No Close Season	
1	1	Bear, over one year old, by individual .....	Nov. 23	Nov. 28
2	2	Bears, over one year old, by hunting party of three or more .....	Nov. 23	Nov. 28
1	1	Deer, Archery Season .....	Oct. 3	Oct. 30
1	1	Deer, male with 2 or more points to an antler or a spike 3 or more inches long .....	Nov. 30	Dec. 12
1	1	Deer, antlerless .....	Dec. 14	Dec. 16
Unlimited		Minks .....	Nov. 21, '59	Jan. 16, '60
Unlimited		Muskrats (Traps only) .....	Nov. 21, '59	Jan. 16, '60
		and .....	Feb. 13	Mar. 19, '60
5	5	Beavers (Traps only) .....	Feb. 13	Mar. 19, '60
Unlimited		Skunks (1959-60) .....	No Close Season	
Unlimited		Opossums (1959-60) .....	No Close Season	

**NO OPEN SEASON** on: Hungarian partridges; hen pheasants; sharp-tailed grouse; cub bears; elk; otters.

Season dates shown are inclusive. All shooting hours are based on Eastern Standard Time. Shooting hours for large and small game resident to Pennsylvania are 7 a.m. to 5 p.m. every day of season except on the opening day of small game season, October 31, when hunting of any kind prior to 8 a.m., E.S.T. will be unlawful. One season-long exception is the archers' deer season, when the hours are 6 a.m. to 5:30 p.m., E.S.T., as prescribed by law. The other exception is the hours for woodchuck hunting which are, by law, 6 a.m. to 7:30 p.m., E.S.T., July 1 to Sept. 30. On the first day of the 1959 waterfowl season the opening hour will be 8 a.m., E.S.T. In brief, the season and bag limit story follows:

### SMALL GAME

The 1959 season for hunting ruffed grouse, squirrels (gray, black and fox), cottontail rabbits, ringneck pheasants, and bobwhite quail will begin October 31 and end November 28. The wild turkey season will be October 31 to November 21. The cottontail rabbit season will reopen December 26 and run concurrently with the snowshoe hare season, ending January 2, 1960.

Red squirrels may be taken in unlimited numbers except between October 1 and 30, 1959, when the season on them is closed.

Grackles (bronze and purple), raccoons (by either the hunting or trapping

method), woodchucks, skunks, and opossums, may be taken in unlimited numbers during the entire hunting license period which begins September 1, 1959. Except that game species, including woodchucks and raccoons, may not be hunted on Sunday.

### LARGE GAME

**Bears.** November 23-28.

**Deer. Archery Season for Deer.** October 3-30. By law, any deer regardless of size or sex, may be taken.

**Antlered Deer Season.** Male, with 2 or more points to an antler, or with spikes 3 or more inches long, November 30-December 12.

**Antlerless Deer Season.** Antlerless (without visible antlers), December 14-15 and 16.

Though there are three separate seasons for taking deer a hunter may legally kill only one deer in 1959.

### FURBEARERS

The trapping dates below are inclusive, but in each case the trapping season opens 7 a.m. on the first day, terminates at noon on the last day.

The season for minks and muskrats opens November 21, 1959, closes January 16, 1960.

The price of fur continuing low there has been an inadequate harvest of muskrats. Also muskrats are causing serious damage to farm ponds. Therefore the additional season Feb. 13-March 19, 1960.

Beavers (by traps only), February 13 to March 19, 1960.

There is no season on otters.

The seasons and bag limits declared today are much in the pattern of those during the 1958 license period. However, there were these departures or items of particular note:

1. A three-day antlerless deer season will follow the "buck" season.
2. Bow and arrow hunters will enjoy 24 hunting days in their deer season.
3. Hunting for all native small game this fall will open in the same day—Saturday October 31. That season will run for 4 weeks, ending November 28, except the wild turkey season which is for 3 weeks and includes 4 Saturdays.
4. The season for wild turkeys will end November 21, which is just prior to the date the bear season opens.
5. Turkey hunting will be closed in 1959 in Adams, Cumberland, Perry and York Counties and that part of Franklin County lying south and east of U. S. Route 11. This is a problem area. Research studies indicate the desirability of this closing for a time.
6. An extra cottontail rabbit season will run concurrent with the snowshoe rabbit (hare) season—December 26, 1959 to January 2, 1960.

The Game Commission considered season and bag limit proposals offered by foresters, sportsmen, farmers, Game Protectors, wildlife research people, and others. Mindful of its responsibility in the matter of wildlife management the authority was liberal as possible, considering the anticipated populations of game and fur animals during the seasons within the 12-month period covered by the 1959 license.

### MIGRATORY GAME BIRDS

The seasons, bag limits and shooting hours for migratory birds will be announced later. They have not as yet been established by the Federal Government. Conditions in the northern nesting grounds have not been favorable during 1958 and 1959. It is therefore conceivable the 1959 duck season and bag limit will be reduced.



## COMMISSION ALLOCATES 371,550 LICENSES FOR ANTLERLESS DEER DURING 1959 SEASON

The Pennsylvania Game Commission, by resolution adopted at its meeting on July 1, 1959, and pursuant to authority conferred upon it by law, declared an open season for the hunting, taking and killing of antlerless deer (deer without visible antlers or horns), regardless of sex, size, age, or camp limit, on December 14, 15 and 16, 1959, throughout the entire Commonwealth, except in Game Refuges or Propagation Areas (other than on any of the latter which the Commission may later specifically declare open to deer hunting) established by the Commission, during which time antlerless deer may be hunted for and taken only in the manner prescribed by the provisions of the Game Law and resolution and regulations of the Commission.

The quota of Antlerless Deer Licenses for each County, as made available by action of the Commission, is as follows:

### NUMBER OF LICENSES ALLOCATED FOR ISSUANCE BY EACH INDIVIDUAL COUNTY TREASURER

County	County Seat	No. of Licenses	County	County Seat	No. of Licenses
Adams	Gettysburg	2,500	Lackawanna	Scranton	3,000
Allegheny	Pittsburgh	1,500	Lancaster	Lancaster	2,000
Armstrong	Kittanning	3,250	Lawrence	New Castle	2,000
Beaver	Beaver	1,250	Lebanon	Lebanon	3,000
Bedford	Bedford	6,700	Lehigh	Allentown	2,000
Berks	Reading	6,500	Luzerne	Wilkes-Barre	7,500
Blair	Hollidaysburg	4,500	Lycoming	Williamsport	9,500
Bradford	Towanda	7,000	McKean	Smethport	16,500
Bucks	Doylestown	3,250	Mercer	Mercer	3,000
Butler	Butler	5,000	Mifflin	Lewistown	3,500
Cambria	Ebensburg	5,000	Monroe	Stroudsburg	6,500
Cameron	Emporium	4,250	Montgomery	Norristown	3,000
Carbon	Jim Thorpe	7,000	Montour	Danville	1,250
Centre	Bellefonte	9,000	Northampton	Easton	2,500
Chester	West Chester	3,000	Northumber-		
Clarion	Clarion	5,000	land	Sunbury	3,000
Clearfield	Clearfield	7,000	Perry	New Bloomsfield	5,000
Clinton	Lock Haven	5,500	Philadelphia	Philadelphia	....
Columbia	Bloomsburg	5,500	Pike	Milford	8,000
Crawford	Meadville	6,500	Potter	Coundersport	14,000
Cumberland	Carlisle	3,200	Schuylkill	Pottsville	13,000
Dauphin	Harrisburg	4,000	Snyder	Middleburg	3,000
Delaware	Media	500	Somerset	Somerset	8,500
Elk	Ridgway	16,500	Sullivan	Laporte	7,000
Erie	Erie	5,500	Susquehanna	Montrose	7,250
Fayette	Uniontown	3,000	Tioga	Wellsboro	8,000
Forest	Tionesta	15,000	Union	Lewisburg	3,000
Franklin	Chambersburg	4,400	Venango	Franklin	6,000
Fulton	McConnellsburg	3,750	Warren	Warren	16,500
Greene	Waynesburg	1,500	Washington	Washington	1,250
Huntingdon	Huntingdon	8,000	Wayne	Honesdale	8,500
Indiana	Indiana	5,500	Westmoreland	Greensburg	7,500
Jefferson	Brookville	5,500	Wyoming	Tunkhannock	5,000
Juniata	Mifflintown	3,250	York	York	3,000
TOTAL					371,550

**IMPORTANT-DO NOT MAIL APPLICATION TO PENNSYLVANIA GAME COMMISSION OR DEPARTMENT OF REVENUE, HARRISBURG.** Antlerless deer licenses will be available early in October at County Treasurers' offices only.



NEW STUDENT OFFICERS are welcomed by the Game Commission's training school near Brockway on June 15 by Superintendent Donald E. Miller, right, and his assistant Roger M. Wolz.

## NEW CLASS BEGINS TRAINING AT COMMISSION SCHOOL

Twenty-five men who were carefully selected by the Game Commission as field officer trainees were enrolled Monday, June 15, in the Ross Leffler School of Conservation located in Jefferson County. Each of the men in this 10th Student Officer Class must successfully complete 9½ months of intensive training at the School and in the field before qualifying for a commission as a Pennsylvania Game Protector. These enrolled in the current wildlife management course come from 19 counties. Their names and addresses are:

Lowell E. Bittner	355 N. 6th St., Lehigh	Carbon
Howard W. Bower, Jr.	42B Hall Manor, Harrisburg	Dauphin
Leslie V. Haines	200 Russ Lane, St. Marys	Elk
Theodore Vesloski	13 St. James St., Plains	Luzerne
Richard W. Anderson	828 W. Spring St., Titusville	Crawford
Jay D. Swigart	155 Mulberry St., Kittanning	Armstrong
Edward F. Bond	116 Newtown St. Rd., Newtown Square	Delaware
Arthur D. Rockwell	R. D. 3, Troy	Bradford
Donald E. Watson	Box 514, Milesburg	Centre
Jacob I. Sitlinger	Gratz	Dauphin
Joseph L. Wiker	277 E. Third St., Monessen	Westmoreland
Harry E. Merz	125 Clay Drive, Pittsburgh 35	Allegheny
Cordell L. Martz	608 N. Third St., Harrisburg	Dauphin
Duane J. Moore	14 Fifth St., Galeton	Potter
Perry A. Hilbert	Route 1, Macungie	Lehigh
Philip L. Young	R. D. 6, Wellsboro	Tioga
Cecil E. Toombs, Jr.	R. D. 3, Coudersport	Potter
Robert H. Muir	141 River Ave., Natrona	Allegheny
Wilmer R. Peoples	202 Ridge Ave., Punxsutawney	Jefferson
Richard W. Donahoe	414 St. Lewis St., Lewisburg	Union
Richard F. Leonard	Box 127, Roulette	Potter
Homer R. Curfman	R. D. 1, Hesston	Huntingdon
Jack McGee Lavery	McClellandtown	Fayette
Gilbert J. Martin, II	643 N. 11th St., Allentown	Lehigh
Robert N. Nolf	123 N. Broad St., Nazareth	Northampton



### Bounty Claims and Payments Decrease

The numbers of foxes and great-horned owls probated in Pennsylvania, on which the Game Commission paid bounty during the fiscal year ending May 31, 1959, fell below those for the previous twelve months by these amounts: gray foxes, 2002; red foxes, 458; and great-horned owls, 68. Because of the drop in valid claims during the last fiscal year the bounty payment total was \$10,180 lower than that for the 1957-58 year.

A comparison of bounty payments for predators killed in Pennsylvania during the Commission's past two fiscal years follows:

Bountied Predators	1957-58	1958-59
Gray Foxes .....	11,006	9,004
Red Foxes .....	18,125	17,667
Great-Horned Owls ...	1,115	1,047
Total .....	30,246	27,718
Total Amount Paid ...	\$122,099	\$111,919

DECOY FOR RUSSIA got finishing touches from Jack Sweet, master decoy maker of Erie. Sweet was selected by U. S. Government to fashion the pintail, a redhead, and a black duck decoy for inclusion in a cultural exchange display. The display will be held in Moscow and these decoys are now rushin' to Russia via steamer and rail. Because of the importance of making these decoys highest quality, Sweet spent so many hours on each one that if placed on the open market, few could afford them.

Photo by Bill Walsh



### U. S. Fish & Wildlife Service Reports Poor Prospects For Waterfowl Production

Extreme drought in the prairie provinces of Canada, where 60 to 70 percent of North America's ducks are produced, may severely limit the 1959 production, according to reports from the Department of the Interior. Wildlife men who attended the Atlantic Waterfowl Conference in May agreed that possibilities at the principal "duck factories" are not presently bright. The same view is held by a team of National Wildlife Federation specialists who recently made an extensive ground and aerial survey of waterfowl production areas in western Minnesota and the eastern side of the Dakotas. These men gave extensive pothole drainage in the mentioned states and widespread drought as the principal reasons for the current situation.

In southern Manitoba and southern Saskatchewan 75 to 90% of the potholes are dry or will be waterless in the nesting period. There is an added and somewhat mystifying factor: Many of the potholes which do have water and should be harboring wild waterfowl do not have the birds. It is hoped that breeding ground surveys later will reveal that the missing birds merely went farther north in search of more desirable nesting sites.

It is possible that if rain soon falls the situation will at least partially improve. It is possible, also, that waterfowl production from prairie potholes that do have water and from potholes farther north will make up for the deficiencies in the dry localities.

Unless rains soon change the picture hatching time in some parts of Canada will find water areas from five to seven miles apart. For lack of this requisite even mallard ducks, which nest away from water and travel to it with their broods as far as two or three miles, will likely be restricted in their nesting.



RETIRING ENGINEER P. M. Lollich examines gift of appreciation from Division of Land Management fellow workers. Making the presentation was Raymond A. Shaver, of Hershey, who recently was appointed to succeed Lollich as Chief Engineer for the Game Commission. Lollich had more than 22 years of service and was in charge of the engineering section.

### **Eastern States Biologists Meet To Discuss Rabbit Management**

Two Pennsylvania Game Commission biologists recently participated in a Cottontail Rabbit Technicians' Forum held at the Field Headquarters of the Massachusetts Division of Fish and Game, at Westboro. For at least five years technicians working with rabbits have been trying to set up such a meeting. Since the mid-Atlantic and northeastern states have common rabbit management problems the forum offered an excellent opportunity for an exchange of ideas, the description of programs, discussion of techniques and planning of cooperative efforts.

Though Pennsylvania's hunting season for rabbits is the shortest of any of the mid-Atlantic or northeastern states, cottontail populations have fluctuated almost simultaneously throughout the entire region. The last high was enjoyed in 1955 and a general low was experienced in 1958. These same fluctuations occurred in areas closed to hunting. This indicates that hunting was not responsible for or related to the population ups and downs.

Reports of various studies re-emphasized the role of adequate food and cover. A vast difference in cottontail production and populations was demonstrated in a study of wildlife conservation practices in farming as opposed to the usual clean farming methods employed on many agricultural areas. The area "clean-farmed" in conventional manner supported only about 6% of the number of rabbits supported by the wildlife conservation farm. Many of our agricultural areas today support only a fraction of the number of cottontails, compared to twenty years ago when brushy fencerows, overgrown swales, briar thickets and heavy cover in farm woodlots were common.

In the Massachusetts meeting a review of restocking results left little doubt there was questionable value in restocking to improve cottontail populations. New Jersey is the only state in the region currently permitting the importation of cottontails for release. New Jersey's sole purpose in releasing cottontails is an attempt to satisfy an immediate need for cottontails on beagle trial grounds following that state's hunting season



because these areas are open to public hunting. There is no intent there to attempt to improve the fall population by restocking.

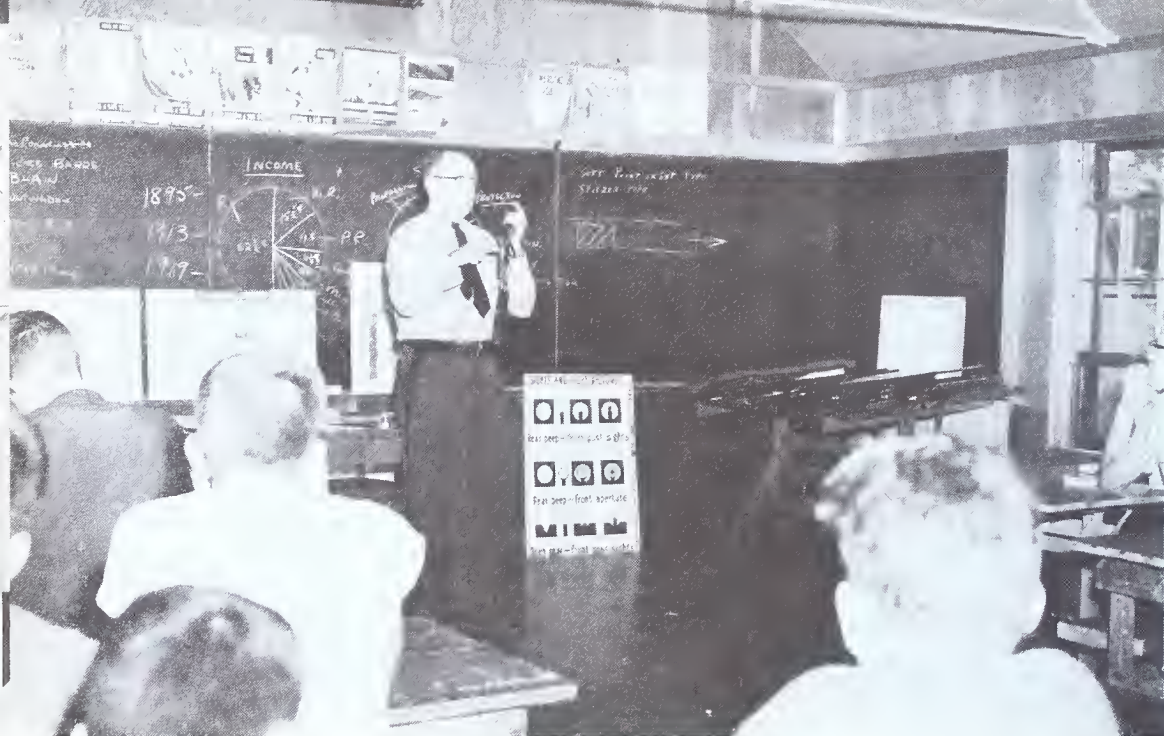
There was general agreement among the technicians who met at Westboro that many sportsmen do not recognize the changes in habitat which affect cottontail and other game populations. For the most part good rabbit habitat is short lived, and various methods of habitat manipulation must be employed if a continuing supply of cottontails is to be provided.

Again, as in past years, the Pennsylvania Game Commission offers assistance to landowners and sportsmen interested in planning ways to estab-

lish improved living conditions towards the production of a larger cottontail population. Rocky or poorly drained sites, odd corners and other "off" areas found in most farms could, if developed, contribute markedly to rabbit production. The Commission has developed many such areas but it is impossible for the personnel of the agency to reach out to the myriads of potential sites found on farms scattered all over the state. There is ample opportunity for rabbit hunters and beaglers to improve their sport by producing desirable living conditions for the popular cottontail on privately-owned properties.

**RETIRING CHIEF OF PROPAGATION** Earl S. Greenwood was presented a gift of appreciation from his co-workers in the Game Commission on July 3. Making the presentation was Ralph Britt who has been named acting chief of the Division of Propagation. Greenwood retired at age 65 after completing more than 25 years of service. He was in charge of all Commission game farms, rabbit live-trapping and transfer program, day-old pheasant chick program and other phases of artificial propagation and restocking work.





**HUNTER SAFETY CLASS** is conducted for each of four groups of junior sportsmen attending the Pennsylvania Junior Conservation Camp near State College each summer. Here Conservation Information Assistant Joe Chick of the Game Commission's Southcentral Field Division explains firearms nomenclature to boys from the PFSC southcentral and northeast divisions on July 3.

## Commission To Advance Firearms Safety Program

Recently, Game Commission representatives responsible for the advancement of the firearms and hunter safety training program—men from the agency's Harrisburg headquarters and field division offices—planned further schooling for the instructors at meetings to be sectionally arranged.

The Commission is just completing its first year as a state organization engaged in firearms and hunter safety training. Splendid progress has been made. In the past 12 months all Pennsylvania Game Protectors qualified as instructors for the course designed by the National Rifle Association. They in turn have taught 1,700 other instructors who have been certified. Since the Commission entered the project 11,000 Pennsylvania students, mostly boys but including some girls, have taken and passed the training course.

Now the desirability of a greater number of active instructors is being stressed to the end that, with the ex-

perience already gained and better coordination of the project, a greater number of youngsters will be taught firearms and hunting safety in the next twelve-month period.

According to an N.R.A. report, approximately 1,300 Pennsylvanians qualified as instructors and 4,000 youngsters completed the firearms training course prior to the Commission entrance into the program beginning in June 1958. To the present then, about 3,000 adults in the state have qualified to teach the firearms course and 15,000 youngsters have successfully completed the safety training.

## 500th Tree Farm Award Presented

Pennsylvania's 500th award of membership in the American Tree Farm System for good forest conservation practices has been presented to Robert Patterson of Tionesta.

Patterson and eight others received their signs and certificates of membership at the first Pennsylvania Tree Farmer's Assembly at the Roy



McCorkel Tree Farm near Tyrone. The awards were presented by R. C. Wible of Harrisburg, state forester.

The Tionesta man was honored for sustained yield timber cutting practices, thinning forest stands, planting trees and protecting his woodland from fire, destructive grazing and insects.

The eight others honored for similar good practices were: Dr. Edward W. Pangburn, Lewisburg; Glatfelter Pulpwood Co., Spring Grove; Beerits' Estate, Somerset; Harold Park, Benton; Larimer & Norton, Tidioute; Robert F. Sigel, Warfordsburg; James Hessler, Muncy; and Harold Van Sickle, Danville.

George F. Patterson of Wellsboro, chairman of the Pennsylvania Forest Industries Committee, which sponsors the Tree Farm program in the state, said the possibilities of increasing timber production through such tree farming practices are "every bit as spectacular as the remarkable advances in foodstuffs production."

PENNSYLVANIA'S 500TH TREE FARM and eight other awards were presented at a recent Tree Farmers' Assembly at the Roy McCorkel Tree Farm, Huntingdon County. From left: Robert Bommer, Bedford, inspecting forester who accepted certificate for Robert Sigel, Warfordsburg; Dale Hessler, Muncy; Robert Pangburn, Lewisburg; D. E. Hess, Glatfelter Pulpwood Co., Gettysburg; Robert Patterson, Tionesta, the 500th tree farmer; N. C. Tuttle, Hammernill Paper Co., Erie, chairman of the Pennsylvania Tree Farm Committee; Harold Van Sickle, Danville; Harold Park, Benton; J. B. Zimmerman, Somerset; and L. H. Noll, Tidioute.

## New Booklet Published For Pennsylvania Travelers

DISCOVERING PENNSYLVANIA is the title of the new 112-page booklet which describes many of the worthwhile places to visit in Pennsylvania. Like a fresh cool breeze following a torrid hot spell, this booklet brings a fresh approach to the historic and scenic wonderland of Pennsylvania. With a Lustre Coat cover and a wide Cerlox (plastic) binding, this booklet is designed to serve as a guide to the motorist fortunate enough to be able to travel in Pennsylvania, and at the same time provide thrilling enjoyment to those who must travel by way of the armchair.

Included also are historical accounts of communities and sections of the State which played an important part in Pennsylvania's life from its earliest beginning. The booklet sells for \$1.50 (plus 6¢ Pa. Sales Tax) and may be secured by writing Pennsylvania Publications, Cresco, Pa.



## IN MEMORIAM

**Harold Moltz**

Harold Moltz, a former member of the Pennsylvania Game Commission, died in Williamsport on June 10, following a lingering illness. He was 72.

Mr. Moltz was first appointed to the Commission August 13, 1942 and served until December 9, 1942. He was reappointed July 22, 1942 and served until the expiration of his term on January 20, 1953.

The former member of the Commission owned and operated a large automobile agency in Williamsport and was also active in other business enterprises. He was an ardent sportsman and owned many fine bird dogs.

**Game Commission's Howard Nursery Produces Six Million Seedlings For Spring Planting**

Almost 6,600,000 food and cover seedlings were shipped this spring from the Game Commission's Howard Nursery located in Centre County. The wildlife agency's Food and Cover Corps, under the direction of Land Managers, planted approximately 675,000 of the seedlings on State Game Lands.

About 2,025,000 were given landowners cooperating in the Farm Game Program. These seedlings will benefit all parties concerned. Not only will they improve wildlife conditions on the farms whereon open hunting is enjoyed, they will often serve the dual purpose of beautification and soil erosion prevention.

An additional 3,900,000 of the seedlings went to Soil Conservation Districts, Boy Scouts, sportsmen's organizations, 4-H Clubs, and other organizations interested in the conservation of soil, forests and wildlife in Pennsylvania.

Following are some of the game food species planted this spring: silky dogwood, tartarian honeysuckle, autumn olive, multiflora rose, bitter-sweet, highbush cranberry, Asiatic crabapple, and lespedeza natob.

Among the seedlings planted to provide protective cover for wildlife were: Scotch, red, white and Austrian pine, also Norway and white spruce.

**GAME NEWS PAID CIRCULATION HITS RECORD HIGH**

The Game Commission's official monthly magazine reached a new all-time record in paid circulation with the June issue. Copies of the 64-page periodical were mailed to 53,137 subscribers in all parts of Pennsylvania, many other states and several foreign countries. Preliminary circulation figures on this July issue of the magazine also show another new record with 53,920 paid subscribers.

Representing the highest circulation in the magazine's 30-year history, the figures reflect a rising trend of public interest in hunting, wildlife management and outdoor recreation.





**ARMY AWARD** was presented to Pennsylvania Secretary of Forests and Waters Maurice K. Goddard on July 8. The Secretary of the Army and the Chief of the U. S. Army Corps of Engineers cited him with the Army's second highest distinguished public service award—the Patriotic Civilian Service Award—in recognition of his close cooperation with the Corps of Engineers in providing increased flood protection and improved navigation facilities for Pennsylvania. With Secretary Goddard in ceremonies held in Harrisburg were, from left: Col. T. D. Setliffe, Governor David L. Lawrence, Col. Stanley T. B. Johnson, Col. Stephen E. Smith and Lt. Col. W. W. Boggs.

**NATIONAL AWARD** was presented recently to Harry Allaman, second from right, by M. J. Golden, Executive Director of the Game Commission. Allaman conducts a regular weekly program over WGAL-TV, Lancaster which was cited for contributing to public awareness of conservation. Golden made the presentation for the American Association for Conservation Information. Looking on at the presentation are, from left: Glenn M. Markle, Public Relations Manager of the P. H. Glatfelter Co., Spring Grove, Pa. which sponsors the program; Harold Geiger, a forester with the Glatfelter company; and Harold E. Miller, station manager of WGAL-TV.





## OUTDOOR FUN WITH A FUTURE



# Plants and How They Grow

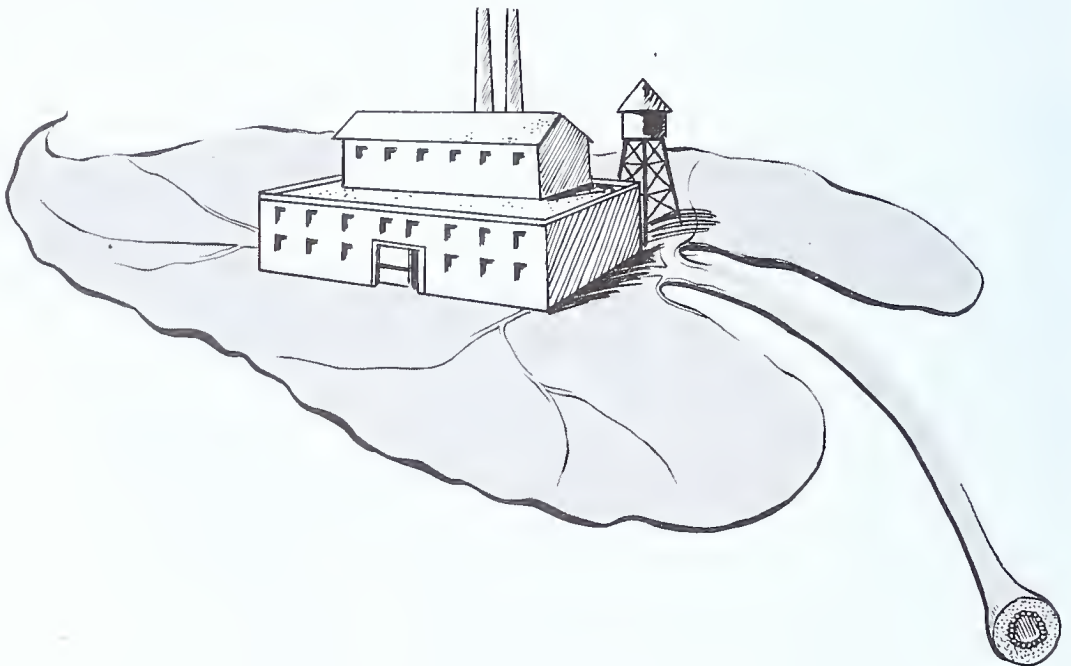
By Ted S. Pettit

**A**NY wildlife conservationist must know almost as much about certain plants and how they grow as he does about the animals that may be his chief interest. For animal life would not exist on earth without plant life and a very large part of the science of wildlife management is concerned with managing the growth of certain kinds of plants—grasses, shrubs and trees.

First of all, animals depend directly or indirectly on plant life for food. Deer, quail, turkeys, grouse, muskrats

and beavers for example depend directly upon plant life for a large part or all of their diet. Raccoons, foxes, trout, bass, ospreys or herons are animals that eat other animals—but the animals they eat get their food from plants. Any animal you can think of is dependent on plant life for food.

Most animals too, depend upon plant life for protection from their enemies and from heat or cold, and for places to build nests or dens. Raccoons may den in a hollow tree where





a woodpecker, chickadee or mouse also has a nest. Muskrats and beavers build their houses of plant materials as do squirrels, deer, cottontails, quail or pheasants find their homes in dense brushy areas, hedgerows or tangles of brier, wild grape or even high grass.

Plants are important in other ways too. Some of them help to break up rocks to form soil; others help build up fertility of the soil. Many plants help to hold the soil in place so it will not wash or blow away. Plants are tremendously important to animals—and for one very good reason. Plants can do something which animals can not do for themselves. Plants can use water and minerals from the soil and carbon dioxide from the air, and in the presence of sunlight manufacture food that is the base of a food chain for all living animals.

### See for Yourself

If you haven't already tried these experiments in school or as part of Scout or 4-H projects, it is easy to see for yourself that plants do manufacture food, and that they need sunlight to do it. Here's how: The first project shows that starch is present in plants. How do you know? You test different plants and see it for yourself. First, get a little starch which is used in washing clothes. Place this starch in a bottle with some water and shake it up. Add a few drops of iodine from the medicine cabinet. What happens? What color does the starch turn when iodine is added?

Next, cut up a potato, a carrot, an onion, and any other vegetables that are around the house. Test them for starch in the same way. Place the pieces of vegetables in a bottle, add water, and shake them up. Add iodine. If the color changes as in the first project, you can see that starch is present in the vegetable. If there is no color change, the chances are that there is little if any starch in that vegetable.

To test leaves of different plants

for starch, you will have to try another project. Take the leaves of several plants and place them in a Pyrex cup filled with alcohol. Then place the cup in a pan of water and place the pan of water over heat from a gas or electric stove. As the water boils, so will the alcohol. As soon as the leaves lose their green color you are ready for the test.

You know from a previous project that iodine in contact with starch turns a purplish or bluish color. So put a drop or two of iodine on the leaves which you have just boiled. What happens? If there is a change in color there is starch present. If not, there is little if any starch.

The next project shows that plants need sunlight to manufacture food.

Use one of the plants that you used in the last project, one that showed that starch was present. Make an envelope out of black paper and cover one or two growing leaves on the live plant. Seal up the envelope so that no light reaches the leaf. Leave it that way for several days, then remove the envelope and the leaf. Boil the leaf in alcohol as before, and put a drop of iodine on it. You know from your last project that this plant showed starch to be present in the leaves. But after the leaves have been covered for several days, is starch still present? Can you see that sunlight is necessary for the plant to grow?

### Plants Need Good Soil

Collect samples of three kinds of soil: Some good loamy topsoil; some gravelly or clay subsoil and some soil from an eroded slope or field.

Get three flowerpots, small wooden boxes, or tin cans. If you use boxes or cans, punch a few holes in the bottom. Place a layer of stones and then pour a different kind of soil into each container.

Now plant a few seeds in each container; three or four radish seeds, two or three beans, and some corn will be sufficient for the experiment.

Place the containers in a warm, sunny window, or outdoors if the weather is warm. Water them every few days. Compare the seeds in the three containers as they grow. In which soil do they sprout first? In which soil do they seem to grow the fastest? After a few weeks, which soil has the healthiest plants? Compare similar plants in the containers. That is, compare beans with beans, and radishes with radishes; not beans with corn, or corn with radishes.

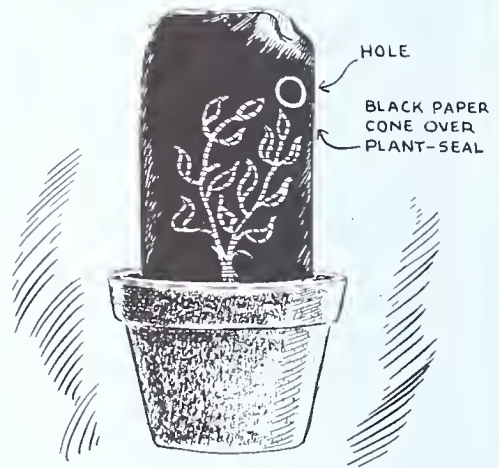
At the same time, or afterwards, you may be interested in another experiment. Get two more containers and fill them with sandy soil. Add half a teaspoonful of commercial fertilizer, such as farmers or gardeners use, to one container. You can get it in hardware stores, seed stores, or even florists. Mix the fertilizers thoroughly with the soil. Then plant the same kinds of seeds as in the first three cans. Place the latter two cans in a warm spot and water them every few days. How does the growth of the seeds in the can with the fertilizer compare with the growth in the can that has just soil?

The fertilizer supplies the elements that plants need for growth: nitrogen, phosphorus, and potassium. Sandy soil alone may not contain these elements.

But humus may also supply some of these elements. Find some leaf mold in a woods, or find some well-rotted animal fertilizer and mix a little with the soil in a sixth can of sandy soil. Plant the same seeds as you did in previous experiments. Compare the plant growth in this can with that in the can that has sandy soil alone. Can you see how plants and animals help to build up the soil?

#### Plants Need Moisture

To find out how important water is to plants, you may want to try an interesting project. It is similar to the projects in which you tested different kinds of soil to find out which was best for plant growth.



Use three flowerpots, or large tin cans, and fill each with good rich soil. In each pot or can, plant three or four bean seeds, corn seeds, or radishes. Place the pots in a warm sunny spot, and keep the soil moist, but not too wet. When the seeds have sprouted, and have grown three or four inches high, it is time to start the main part of the project. Stop watering the plants in one pot and continue to water the plants in the other pots. What happens to the plants that do not get any water? How do they compare with the plants that are in the pots that get plenty of water? Carry on your observations for several days, then again water the plants in the first pot. Can you see any difference when the plants again get water?

If the plants in the first pot can be brought back so that they look healthy again, use them to prove that plants need sunlight to live. Otherwise, use the plants in one of the other pots.

Place the pot and plants in a dark room, a closet, or in a dark spot in the basement, and leave them there for several days. Observe the plants carefully, and compare them with the plants that have been growing in a sunny spot. What do you notice about the plants that have been placed in



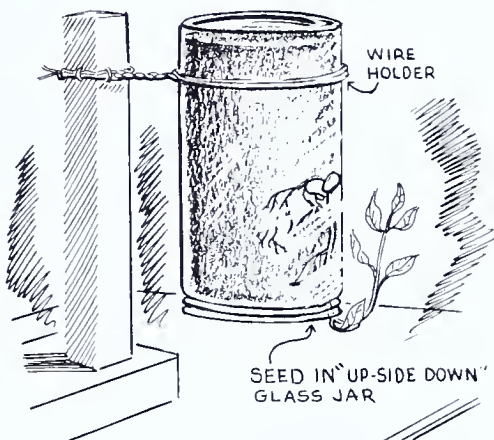
the dark? Can you see that plants need sunlight to live?

### Plants Grow Toward Light

Use the pots or cans with beans or corn growing in them for the next project. Make a tube of black paper, the same diameter as the flowerpot or can, and several inches higher than the plants that are growing in the pot. Place the tube over the pot and pin the top so that no light may enter. The plants should now be in total darkness. Cut a hole in the paper tube, about an inch in diameter, slightly above the top of the plant. Leave the tube on the pot for several days, but keep the soil moist. If you take the tube off, always replace it in its original position. After several days, observe the plant carefully. Has it turned toward the hole in the tube? Can you see that the plant grows toward the light?

Now turn the tube around, so that the hole is on the opposite side. Keep the soil moist, and keep the tube in place for several days. Then observe the plant again and see what has happened.

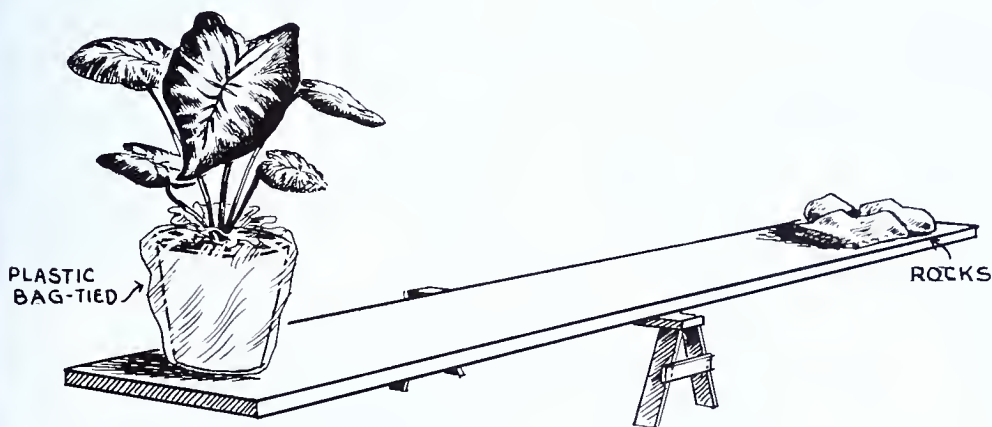
Have you ever noticed that stems of plants grow up, and that roots grow down? Here is a project that will show you that this always happens with most plants. Use an olive bottle, or a water glass. Get piece of blotting paper or absorbent paper



toweling. Roll it up, and insert it in the bottle or glass so that it clings to the sides of the glass. Then pry the blotter or toweling away from the side of the glass, and drop two or three corn seeds or beans into the tiny pocket formed by the paper and the glass. The seeds should come to rest about an inch below the top of the glass or bottle.

Pour some water into the bottle until the paper is thoroughly soaked. Keep the paper wet for several days. What happens to the seeds? Have roots formed? How about the stem and the leaves?

When the stem has grown up well above the top of the bottle or glass,



wet the paper again, and then tie a piece of string tightly around the bottom of the bottle. You may want to hold the string on with adhesive tape or friction tape to keep it from sliding off; or you may use wire as shown in the illustration. Then fasten the other end of the string to a nail or hook, so that the bottle will hang upside down. The bottle should be placed in a light place.

Watch the stem and roots of the plant. What do they do? Do they continue growing as before, or do they turn around so that the stem grows up and the roots down? After several days, during which time you have kept the paper wet, replace the glass in its normal position. Watch it again for a few days. Can you see that the stem always grows up, and the roots down?

### Plants Give Off Moisture

The illustration of a green plant as a factory that manufactures food shows that plant leaves give off moisture. Here's a way to prove it.

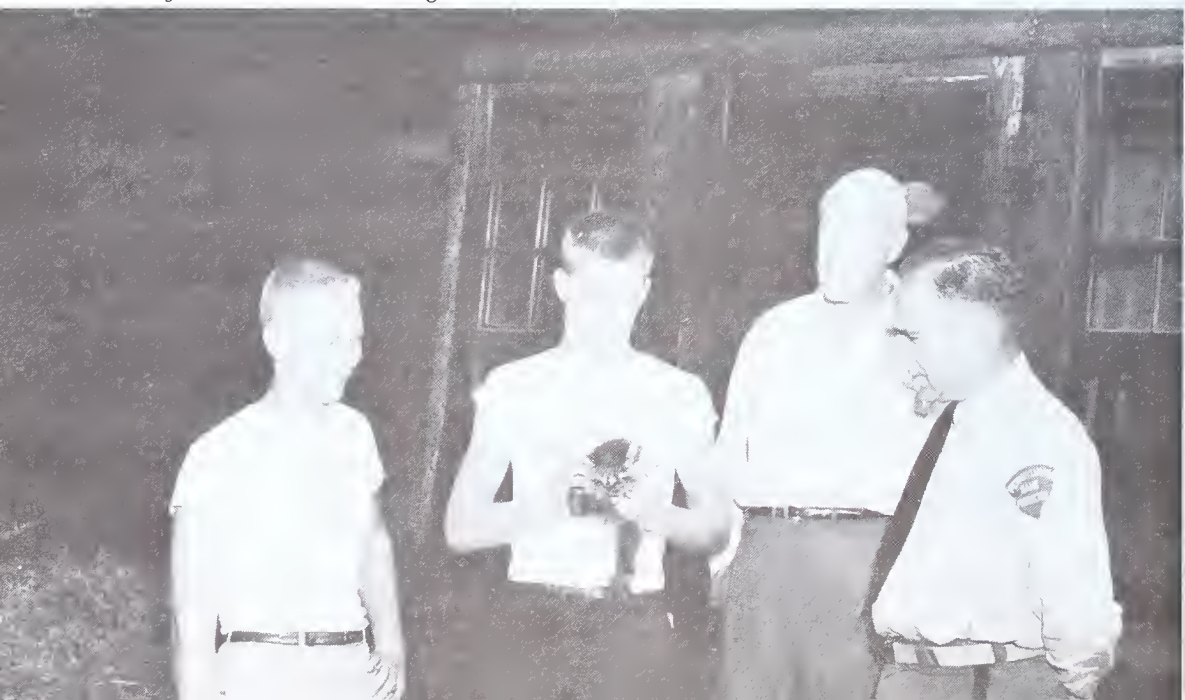
Use any house plant or small plant growing in the garden. Water it well. Then place a plastic bag over the plant and tie the mouth of the bag tight around the stem of the plant above the soil. Place the plant in the sun and see what happens. The droplets of moisture in the bag come from the plant leaves.

Another way to do it is this:

Rig up a small see-saw. On one end place a potted plant that has been watered, and the pot enclosed in a plastic bag tied tightly around the stem of the plant. Balance the plant with rocks or bricks. Watch and see what happens. The potted plant will become lighter in weight as it gives off moisture and the bricks remaining the same weight tilt the see-saw out of balance.

These are a few experiments that show how green plants live and grow. Perhaps you can figure out some more, but try a few in any case so that you can see for yourself how plants grow and provide animals with the food and cover they need for life.

HOWDY THE RACCOON in the form of a live kit found by Game Commission officials was center of attraction at the Pennsylvania Junior Conservation Camp this summer. Holding "Howdy" is Warren Singer, a camper from Springville, while looking on are, from the left: Head Counselor Jim Holt; Camp Chairman C. W. Stoddart, Jr.; and District Game Protector Carl Jarret, McConnellsburg.







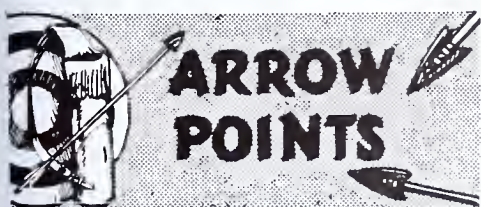
## Pre-season Survey

By Tom Forbes

**A**UGUST marks the mid point in the vacation season for families with school age youngsters. Summer camps, State Parks, and Resort Areas are filled and overflowing with folks who enjoy the outdoors. The family car with trailer attached and loaded with tent and camping gear, or towing an outboard motor boat, is a familiar sight on the highway. A house trailer carrying a Florida license plate moves sedately along at its 40 mile per hour pace bound for a quiet woodland lake in Penn's

woods. At a trailer site located in a grove of towering hemlock, beech, and oaks, the family will set up house keeping and spend the days swimming in the cool, clear water; hiking over the woodland trails, and enjoying their night's rest soothed by the cool breeze blowing off the lake.

By mid-August the archers will be returning from the Nationals. Now that the big time tournaments for the year are over, the bowman will begin to plan for the hunting season and the days to which most of us point all our achery activities. To approximately 73,000 bowmen, field shoots, target tournaments and practice sessions are but the preliminaries. The high point comes when we take our bow into the hunting field during the deer season.



Bowmen in Pennsylvania bagged 1358 deer in the 1958 season. This means that one in every 54 bowmen managed to outwit a whitetail. Luck is a factor, of course, but year after year certain bowmen always achieve their goal. Each season a deer falls to their bow. That deer are abundant in Pennsylvania goes without saying. In April and May of this year the recorded deer mortality was 1257. More than 1,000 deer were casualties on the highways and 170 were killed by dogs. During the same period 57 deer were killed for crop damage and 20 were illegally killed.

A season in which deer could be taken exclusively with a bow was introduced in Pennsylvania in 1951. The bow was legalized as a game cropping weapon in the state in 1929. During the period intervening between these dates a relatively few bowmen used the bow in the hunting field and the kill was not tabulated separately. In 1951 a 12-day, bucks-only season was set by the Game Commission for the bow hunters. A total of 32 bucks were taken by 5,442 bowmen. This unimpressive showing would doubtless have been bettered if any deer could have been

taken. It is well known that statistics can be used to lend support to conclusions which may not reflect the true facts. However it is interesting to note that in two of the any deer seasons of approximately the same length—17 days in 1956 and 18 days in 1958—the ratio of bowmen to deer bagged fell from 1 to 116 in 1956 to 1 to 54 in 1958. The overall picture shows that twice as many bowmen were successful in the 1958 season. In other words, a club with a membership of approximately 100 bow-hunters would percentagewise have killed one deer in 1956 and two deer in 1958. A club whose members in multiples of a hundred bagged more than this number of deer was above the average.

The improved success ratio cannot be pinpointed to any set conditions, but certain factors enter into a successful hunt and excluding the factor of luck they can be listed. Not in the order of their importance, as each complements the other, they generally fall into well defined skills. Marksmanship is a prime requisite. To consistently register a hit good equipment (tackle) is required. It does not follow that you can buy marksman-

CARLISLE ARCHERS conducted a shoot on Memorial Day in honor of Harry Baer, left, who taught many of the club members and other central Pennsylvanians how to shoot. Now past 80, Mr. Baer killed a deer with the bow at the age of 76 and has been an active participant and promoter of the sport all his life. Shown with him is his famous bow-hunting son, Fred Baer of Grayling, Michigan who flew in for the occasion.





ship. Good technique is acquired through many hours of careful practice. The beginner should always shoot under the watchful eye of an experienced bowman. Good form in shooting can be learned from the start. Bad shooting habits are hard to correct. Thousands of bowmen have learned to shoot well. They make good scores on the field courses and can register fairly consistently on any target of their choice. Why do so few of these bowmen bring home a deer during the hunting season? The answer is that a bowman may be a very poor bowhunter. The term hunter has been indiscriminately applied to any individual who buys a license, picks up his weapon and takes to the woods in search of game. A hunter acquires his ability to locate game over a period of years. He acquires knowledge of the habitat required to sustain the game. He recognizes at a glance that some areas will be barren and time wasted if he does not locate areas where food and cover are adequate for the game he seeks. The hunter has developed keen powers of observation. He does not discover game trails and bedding grounds of the deer by chance. He has learned where to look for them. He knows what food is available in his area and where it is located. Mast from the oaks and beech trees may be in abundant supply one year and scarce the next. The hunter knows where stands of these trees are located. Game is fairly regular in its habits. Deer will appear in the same area day after day at the same hour. The hunter has spent hours in his favorite hunting territory with his back against a convenient stump and with a pair of field glasses scanning the surrounding territory. And he sees game. In the early morning he hears a turkey gobble on the ridge above him; in a few moments an answering perk comes from a hen. To the uninitiated the woods is a lonely place, silent and void of life.

To the hunter the sounds of wildlife and the feel of their presence is all around him. A grouse drums in the distance, a hawk glides slowly by overhead, and a blue jay shrieks a shrill warning. The Spanish have a word for it. He is "sympatico." The hunter is attuned to his surroundings.

The bowman who has gone hunting and failed to sight a deer will say. "This is all very good, but I'm no Kit Carson or Daniel Boone. I work for a living and I can't take the time to spend days in the woods prior to the season." Perhaps you have failed to take advantage of the opportunities that you do have. A fishing trip offers an excellent opportunity to survey new hunting territory. Trout, bass, and other warm water fish are in season. Keep your eyes open when fishing a trout stream off the beaten path areas in our state forests. On many of these streams the path along the bank is worn from the hooves of the deer that have passed that way and not as you may have supposed from the feet of other fishermen. The so-called swamp that made it difficult for you to reach the stream may actually be the back water from a beaver dam; another look and you verify this conclusion from the pointed stumps of small trees felled by the beaver for a winter food supply. These summer months are excellent times to check the spring crop of wild life. Fawns have not yet learned to fear man and do unexpected things. Standing in the lower end of a pool on the upper reaches of a trout stream in the State Forest in Potter County I was waiting for a trout to break the mirror-like surface as it rose to feed on insects floating on the water. A movement at the head of the pool attracted my attention. From the grassy left bank a fawn jumped into the pool and started to wade across to the opposite bank. The pool gradually deepened as the fawn approached the far bank and when the water rose to



OUR TENT CAMP was set in a small open glade near the mouth of a small tributary to a main stream.

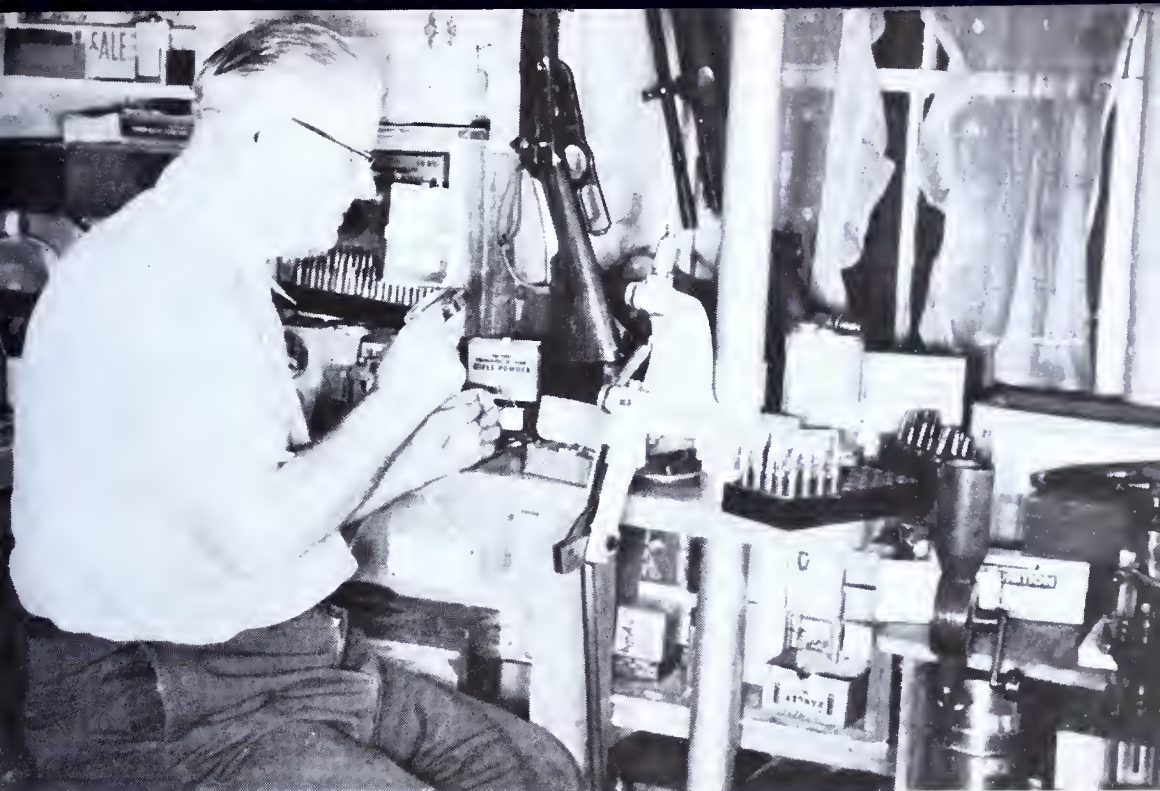
its back the little animal turned and giving up the attempt started back across the pool. Apparently looking for an easy place to climb the bank the fawn waded down the pool in my direction, glancing occasionally at the bank which was not more than two feet high, until it passed my rod tip and stopped within four feet. Looking me over but apparently unalarmed, the fawn decided to leave the stream and with a little effort made the top of the bank. There it stopped and without even glancing in my direction, gazed out over the meadow and finally moved off through the bunch grass that grew along the bank of the stream.

Our tent camp was set in a small open glade near the mouth of a small tributary to the main stream. We left the main travelled highway and drove over an old logging road cut into the hillside above the main stream. Two miles down stream with no turnouts to permit passing if we were unlucky enough to meet an oncoming vehicle we forded the tributary and leaving the log road drove between a scattering of trees and an occasional rock to our camp site in the State Forest.

Keep your camp site free from litter. You won't find trash cans scattered around Penn's Woods, so dig a garbage pit and a sanitary pit when you set up camp and cover them well when you leave. Open camp fires must be made in a hole or pit and encircled with a bare strip of ground. The small mountain brook which flows past the camp site provides an excellent cooler for milk, fruit, and canned juices. Don't expect to use the stream for meat refrigeration. "Howdy," the raccoon travels the stream bed on his nocturnal jaunts and likes nothing better than a nice steak or a mess of fresh trout for a midnight snack.

Whether you camp for a week or a weekend, whether you fish or hike or just plain loaf you can learn much through your eyes and ears that will pay off in the fall hunt. When the day ends you can sit around a small camp fire and watch the full moon coming over the ridge far above, thrill to the lonely cry of the owl; speculate on the night sounds, the woods is never silent, and laugh quietly as a deer on its regular nightly rounds snorts an alarm when it comes in sight of your camp fire.





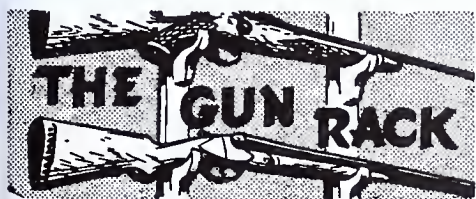
# Hand Loading for Economy and Accuracy

By Jim Varner

**M**ANY years ago I started this business of handloading my own rifle cartridges and shotgun shells. Some of you will ask why! It is true that fairly satisfactory commercial ammunition was available at that time and the price was low. Black powder 22 shorts cost fifteen cents per box, 32/40 165 Winchester center-fire cartridges cost 75 cents per box of 20, the then new 30/40-220 Krag smokeless cost about a dollar for 20 and black powder 12 gauge and 10 gauge shells ranged from 45 to 60 cents per box of 25. Such low prices,

however, were high to a youngster who liked to shoot a lot and who was unable to get his mitts on many big shiny dollars. He had to resort to the next best thing which was loading his own. That was back in the years from 1905 to 1912. The locality was southcentral Iowa where rich soil, huge crops and sparsely settled farms and ranches combined to produce a super abundance of small game. And being not far from the Mississippi and Missouri Rivers meant migratory waterfowl concentrations that were difficult to believe.

The thrilling call of the great V-shaped flocks as they arrived during the migration, the lonesome howl of the coyote at dusk, and the booming bass-drum roll call of the mating prairie chicken or pinneated grouse made it difficult for an over-enthusiastic farm lad to keep his mind



on the farm chores and hike one and a half miles each way to the little rural school, at least to do justice to all when he had in mind a model 1894 32-40 Winchester rifle or a model 1901 gauge Winchester shotgun hid in a big hollow tree to be used on his day home. Gentlemen, those were days that tried men's souls. Some of you know what I mean.

That old 32/40 and big bore, lever action shotgun needed lots of fodder. There was only one way to obtain it and that was load your own. Money obtained to purchase supplies of black powder and lead usually was earned by operating a trap line during the winter or logging, plowing and numerous other endeavors that usually paid somewhere between 50 cents and a dollar a day. Primers cost 15 cents per box, black powder cost 35 to 50 cents per pound, shot averaged 10 cents per pound and we moulded our own bullets and cut wads from heavy cardboard and discarded felt horse collars. Handloading really meant economical shooting.

The handloader of the early 1900's cared little about velocities and pressures. He was striving for the utmost in accuracy and power. He found it necessary to load his own if he expected to attain notoriety in the precision shooting game. In those days the best results were obtained by pains-taking labor and not necessarily by precision equipment like we have now. Tools which would have been the envy of the 1900 handloader are now available, combined with powders that are the personification of cleanliness and uniform performance, not to mention precision made bullets which meet practically every ballistic requirement.

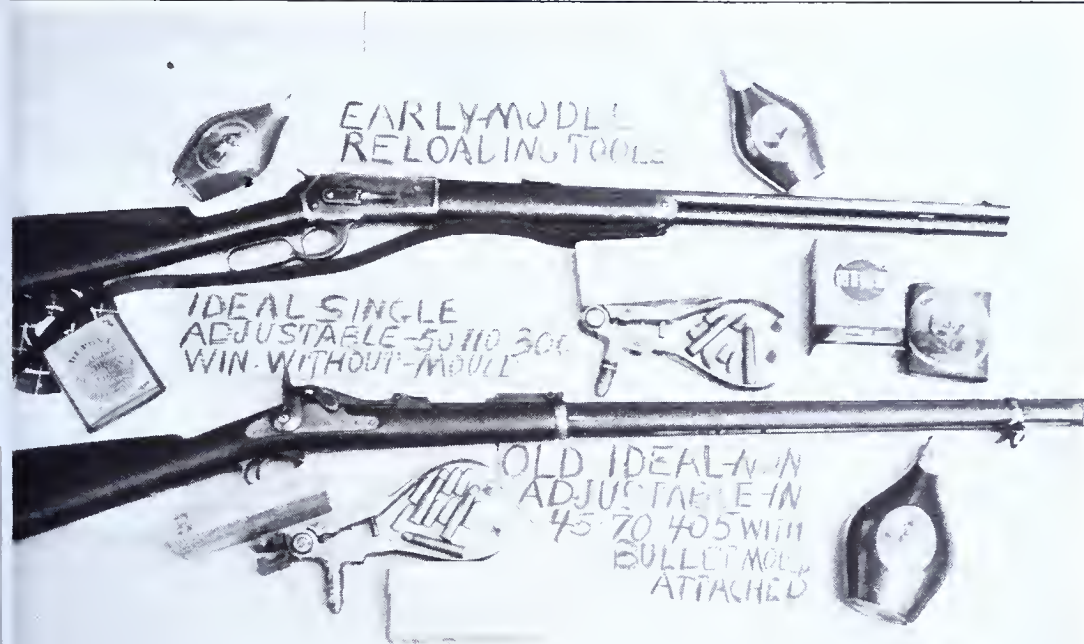
But despite all the research that has been done to aid the handloader, so many careless and haphazard individuals have entered the game that the manufacturers of firearms and the cartridge makers have ceased to encourage reloading and have even

withdrawn all information as to which components are best suited to their arms or cartridge cases. For example, in my collection I have old U.M.C. and Winchester cartridge boxes which have printed upon them full instructions as to primer, powder charge and bullet to use when reloading. They encouraged reloading. But before me I have new boxes of both Western Winchetser and Remington Peters components reading something like this: "SPECIAL NOTICE. The ammunition components contained in this package are of the same quality as those used in the manufacture of our loaded cartridges. Having no control over the loading, however, we do not guarantee the same results as those obtained by our factory loadings." None of the arms companies will guarantee their products where handloading causes an accident. Again, the minority of irresponsible and unthinking careless "goons" spoils an otherwise pleasant scene.

For those who play the game intelligently and for others who wish to enter this fascinating hobby, however, there is an abundance of scientific research easily available through "The American Rifleman" and dozens of other reliable sources dealing with reloading problems so simply and easily understood that you need not hesitate about learning the game thoroughly and safely. If you are a beginner (and the beginner is the one I hope to help and encourage), study your needs carefully before you purchase.

The Lyman Gun Sight Company publishes a very complete book on handloading every cartridge from the tiny 25 caliber pistol cartridge to the 458 Winchester African. The information in this handbook is about all anyone will ever need. Belding and Mull issues another excellent book on complete handloading. For those who load only the popular rifle cartridges, Speer Products Company, Lewiston, Idaho, publishes two excellent manuals—one on factory am-





EARLY MODEL RELOADING TOOLS from the Varner collection include the Ideal single-adjustable chamber with separate bullet mould for the 1886 Winchester 50-110-300 caliber and, lower, the old first model non-adjustable with mullet mould for the 45-70-405 Springfield military rifle. The latter is over 80 years old.

munition and one on the better known of the so-called "wildcat" or off-standard cartridges. If you are a club member or have a reloading group who feels visual instruction will help, Lyman can supply two very exciting full color movies in 16 mm. film that are free for the asking. These are sound movies—one dealing with reloading fired cartridges and the other on bullet making. Both run about 15 minutes each. And if you desire the utmost volume on the reloading game, buy "Complete Guide to Handloading" by Philip B. Sharpe which is published by Funk and Wagnalls Company, New York. This volume will save you a lot of headaches if you are the perfectionist type.

The careless reloader cannot hope to equal the perfection found in our present day factory ammunition. But the careful reloader can improve on nearly any factory product, particularly insofar as performance in his personal arm is concerned. No two

rifles of any make and model can be depended upon to shoot side by side with equal accuracy when using all makes of commercial ammunition. Again you will ask the question why? No doubt five or more ballisticians would answer your question differently if you asked each one separately, and yet the problem is quite simple. The answer is merely that each rifle, because of individual characteristics beyond the control of the maker, is more partial to one load than another—sort of a law within itself. Factory ammunition for your rifle may give satisfactory accuracy and you may load to standard factory ballistics and obtain the same accuracy. You may increase the charge  $\frac{1}{4}$  grain and find your rifle is erratic, or on the other hand find its accuracy greatly improved. Here is where careful systematic handloading pays off not only from an economical standpoint but from the efficiency angle as well. Finding the high point in the efficiency of your individual fire-

arm is what makes the game so much of a challenge to your ego.

During my experimenting I have had the eccentricities, or should we say variables, of different rifle barrels and different load combinations impressed upon me in many ways and in hundreds of different cases long before constructive research was attempted to solve some of the more plaguing mysteries. Today, electronic or spark photography, pressure guns, velocity chronometers and numerous other modern devices have about ironed out all problems that may arise, both as to interior as well as exterior ballistics. In the old days we had to work out these theories the best we could thru trial and error which was a tedious and often unsatisfactory process. Today with above data on ballistic research the embryo handloader can become a proficient maker of excellent ammunition in a

minimum of time, especially if said experimenter heeds all the danger signs and keeps a strict record of all lots loaded, both good and bad. Do not trust anything to memory and I have found one should load at least 5 and preferably 10 rounds of each lot for testing. All testing should be done from at least a firm sand bag rest and preferably from a bench rest. No one can successfully test ammunition for accuracy from off-hand, kneeling or sitting position, and plain open sights are totally inadequate. A good target telescopic sight is the best with hunting scope second best and double aperture peep sights last. If you consider common 50 yard deer shooting accuracy satisfactory most anything will do. Here I wish to caution everyone who reloads against the use of so called maximum loads. In a tight chambered gun a maximum load can be very danger-

**THIRTY-EIGHT VARIETIES** of powder, dating from the early black powder thru the first smokeless to modern powders are shown here. Many of these powders are no longer manufactured and are truly collectors' items.





ous, and in all rifles it is usually less accurate than one using two to five grains less powder. Remember, the only rifles that are interesting are the accurate ones. The same can be said about the cartridge one uses.

Going back to the subject of selection of equipment for the beginner we assume he has received some help from the manuals suggested as well as from tips he has received from experienced riflemen friends who reload. One will usually find N.R.A. members and other rifle club members of long standing willing to lend a helping hand. However, we will offer a few suggestions on purchasing equipment before we start on the mechanics of modern powders, present day precision made jacketed bullets, home-made cast bullets, modern primers and a short discussion on black powders for those who enjoy firing some of the fine old charcoal burners.

As you have discovered by now, there are many types of reloading tools available today and all are good and serve their purpose within their price range. They range in price from \$16.50 for the Lyman No. 310 long or nutcracker type tool complete for one caliber to the large powerful turret type bench tools that are capable of not only complete full length resizing of expanded cases but will reform suitable brass cases to other calibers. One can even buy separate dies for them and form his own precision made metal jacketed bullets. You can spend as much as you want on some of the more complete units which will reload pistol, rifle and shotgun ammunition by simply changing dies. The Lyman 10 tool and the lighter bench type tools like the standard Pacific tool and the Lyman Truline Junior are not suitable for full length resizing of cases which is necessary if you try to reload cases fired in arms other than yours. So do not load up a lot of cartridges in cases other than you

used in your gun without first seeing if they will fit. This is about the only drawback one will find with the lighter tools. Properly handled they will load excellent ammunition. Some of the most accurate cartridges I have ever assembled have been made with the old Lyman No. 10 tool which was not as complete as the 310. Regardless of what you pay for reloading equipment you will be ahead of the game if you like to shoot, but I suggest you buy the best you can afford. The brass cartridge case is the most expensive part of your ammunition. Thousands of all calibered cases are thrown away by unthinking shooters to the consternation of the hand-loader. How many times have you walked on the rifle range and found 15 or 20 new Winchester or Remington cases in 8 mm, 270, 308 or some other excellent caliber there for your picking up. The 30-06, being our military number is more common and easier to obtain which is a big advantage in its favor. So much brass is available in this caliber for the asking and such a large supply of military cartridges are being sold at  $\frac{1}{4}$  to  $\frac{1}{2}$  the cost of manufacture it easily tops the list from most all standpoints where a shooter is wishing to save money and still have one of the best. The military ammunition made during World War Two and since is about as near perfection as one will find in machine loaded cartridges and the prevailing howl of the inexperienced shooter it will ruin your rifle barrel is definitely incorrect.

Along with all tools, you will need an accurate apothecaries scale that will measure to at least  $\frac{1}{4}$  of a grain weight. This item is a 'must.' The Redding Powder and Bullet Scale is a popular one listing at \$14.00. Herter makes a satisfactory one for around \$8.00, or you can go up to the Ohaus and Fairbanks type of druggists scales costing \$35.00 and over. Good powder measures like the

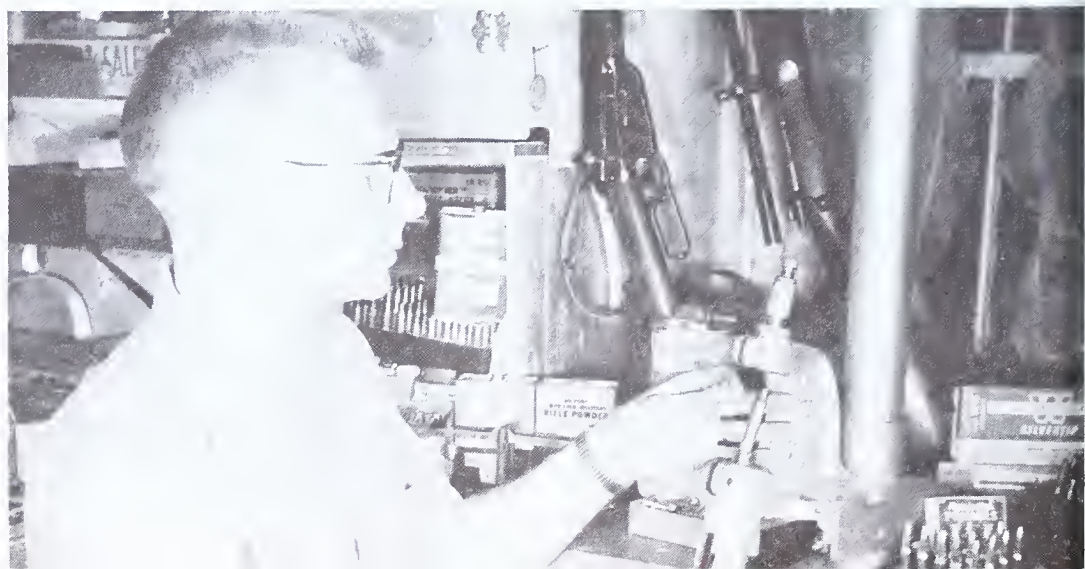
Lyman 55, Redding Master and Belding and Mull and others will save you a lot of time when using fine grained powder for pistols, shotguns and light to medium loads in rifles but don't depend upon them when throwing maximum loads of coarse grained powder in hi-powered cartridges. These measures speed-up mass production but be on the alert against throwing double charges. Check the weight of the charge your measure is throwing with your apothecaries scale every 25 cartridges to make sure there is no slip-up in its adjustments. If you attempt to make little measuring scoops and not invest in a powder measure stay away from anywhere near maximum charges and check the approximate amount your scoop is picking up by weighing on your scale. At the best, scoop loading is unsatisfactory. Some do it.

If you care to cast your own bullets either plain base or gascheck for pistols and light to medium loads in rifles, good bullet moulds are a necessity. They range in price from \$8.00 for single cavity blocks on up. Along with your moulds a good bullet lubricator and sizer is essential for the utmost in making good cast bullets. Of course, this moulding equipment would be incomplete without a

lead melting pot and dipper. One can mould on the kitchen range providing you obtain the permission of the "better half," or you can use a plumbers blow-torch. The new electric furnaces such as the Saeco do an excellent job with a minimum of fuss. Moulding your own bullets is a lot of fun and gives you ammunition at about one fifth to one eighth the cost of factory ammo, due to the fact a lot of scrap lead is always available. If you mould your own bullets I suggest you get a book giving complete instructions on how to mould and all about the physical properties of the different lead alloys more commonly made today. This is very important. We will say more about this later. One can actually load his own 38 Special cartridges with cast bullets as cheap as he can buy 22 long rifle ammunition.

If this preliminary discussion on handloading has interested you and you have jotted down a few mental notes, we will expect to continue the discussion in the September GAME NEWS. Until then, carefully purchase the equipment you intend to use and we will have a real pre-season "pow-wow" on how to best use your equipment—yes, "Handloading For Economy And Accuracy" can be fun.

ASSEMBLING a 30-06, 180 grain Winchester Silvertip bullet in the cartridge is Varner's nephew, Harry Hoffman. He is using the Pacific Super Reloading Tool, one of the first heavy-duty bench tools made.





# Men and/or Dogs

By Horace Lytle

**H**UNTING groups men into various categories: Big game, small game, furred game, feathered game. Most hunters prefer to pursue their game with dogs, of one kind or another. In some states, notably Florida, hounds are used even for deer. Especially trained dogs are often used in hunting wild turkey. And so it goes almost ad infinitum, with no accounting for tastes.

There is one type of hunting, and hunter, you often see in the fields—thank goodness not in the woods! This is the gang method. A “regiment” spreads out, as close together as numbers permit. The forward movement in even line pushes out anything alive—rabbits, pheasants or what-have-you—much as a river is seined for fish life. And whatever gets up, the guns blaze away. Not always with too much effect. No really good shot would ever get caught hunting that way! It’s much the same comparison as between a seine and a fly rod. No dog is used. Nothing alive would be apt to live long in close vicinity to one of these gangs. Whether they ever bag enough game to go around I wouldn’t know. If not, there’s always the butcher shop enroute home.

Then there’s the fellow who is more interested in results than how they are acquired. He’ll want a dog—though type of performance plays no part in his interest so long as it puts game in the bag. If out for feathered game, chances are he’ll



want a slow dog, with no special preference whether it be of a pointing breed, or not. Thus while the canine may be Pointer or Setter, it also (today) may be Spaniel, Retriever or Basset hound. This hunter’s main idea for a dog is to find game and show it within range. Then also effectively to find and retrieve it, if but wounded by the shot.

Next we have the “fly rod man” of the hunting fraternity. He wouldn’t hunt without a dog; nor with more than a single human companion. He may be an ardent fancier of his guns. But he is certain to be even far more devout in his love of his dogs. The talent of his canines will mean many times more to him than his own shooting skill—though he’ll value the latter, too. His bird dogs must be keen, eager and fast, even for grouse and woodcock, as well as pheasants and quail. Since his preference is for wider dogs than most men understand how to handle, they must *point* game and hold it stanchly and true. So you pay your money and you take your choice.



Which type of hunter are you? It's every man to his tastes.

The fellow who falls in this last classification will live with his hunting all year. He's a student of the sport—an artist to whom the *how* game is taken means more than *how much*. His only period of inactivity is from April to August during which dogs may not be worked afield. And even then he may be perfecting retrieving!

As a dog man, I have no patience with the hunter who feels no need of canine companionship and help in field or woods. I even believe it is a fact that much gang-hunting may tend to bring about an intolerant attitude toward dogs. What a pity!

At the same time, what a fine thing it is that some hunting cannot be indulged in all without a dog's help!! Who would try to hunt coon or 'possum without a hound? A gang-hunt might show you rabbits—but how much sweeter to watch a Beagle or Basset do it! How many men drive country roads looking for foxes? Yet thousands of men are thrilled by Foxhound music all night long. Will any duck hunter undress and do his own retrieving from icy water? But to watch the job done for you by Ches-

apeake or Labrador is a sight for sore eyes.

Otter Hounds may not see much activity these days, but their specialty has entertained many a fancier, especially in England. Rat killing is second nature for most of the Terriers; and dispatching a cage-full of big rats can be a barrel of fun, as well as good riddance.

Many dogs form the basis of many sports, besides hunting. Sled dog-teams of Alaska made lasting history with their great Sweepstakes races. Free-running Greyhounds or Whippets entertain thousands at many American tracks. Border Collies put on matchless performances tending and handling stock in thrilling exhibitions.

Verily there is almost no limit to what dogs can do—and will do gladly in aid of an adored Master. But nothing comes quite so naturally, nor thrills so much, as hunting. How any man can enjoy himself to the full without his dog, either afield or in woods, is beyond this writer to fathom. Maybe I'm prejudiced. In fact I know I am. And proud of it. For I know full well how much some of you miss—that some of us don't. Be a dogman and reap a hundred rewards.

---

## IT'S TIME TO TRAIN YOUR HUNTING COMPANION

Dog training season is in.

According to the Pennsylvania Game Laws . . . "Dogs, when accompanied by and under control of their owner, or handler, may be trained upon any game in the Commonwealth except elk, deer, bears or wild turkeys from the first day of August to the thirty-first day of March next following . . ." The term "under control" is defined by the Law as "within call except when actually on the trail or track of legal game."

Other regulations governing such training are: 1. No injury may be inflicted on game birds or animals. 2. Carrying a shotgun or rifle while dog training is prohibited. 3. Raccoon dogs may be trained from sunrise to midnight; other dogs from sunrise to 9 p.m., Eastern Standard Time. 4. Sunday training, except on public lands, is legal only after the property owner's consent has been obtained.

A hunting license is not required of persons training dogs on game.

Training dogs on game birds or animals is not permissible during April, May, June and July—the months during which most of the young of wildlife are produced, at which period eggs, young and the mothers need protection.



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# Through the Seasons With the WILD TURKEY

*Most of these little fellows first see the light of day some time in June.*

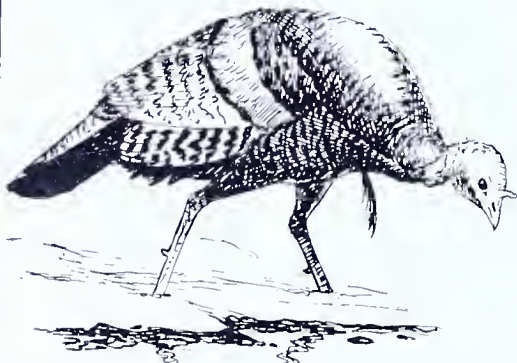
*During their first month*



*or two many fall prey to foxes, weasels, owls, raccoons and other predators. Extremely wet weather is also hard on very young poults.*



*By the time Autumn arrives the young turkeys are nearly as large as their mothers. An abundance of greens, seeds, insects, berries, acorns & beech nuts has put them in fine condition to face the approaching winter.*



*December arrives with its snow and cold. Insects are no longer abroad, - seeds, berries and mast are hard to find. The flocks usually follow small streams in their wanderings, where food is more abundant and grit always available.*



*Spring arrives at last, flocks break up and gobblers strut before their ladies. Bloody battles are waged between rival "toms" for possession of the hens. Within a month or two, however, peace has been restored. The hens are setting and patiently awaiting the June debut of their next generation of youngsters.*



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# PENNSYLVANIA GAME NEWS

SEPTEMBER, 1959

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# THE STORY BEHIND THE COVER

**M**ANY are the mysteries of a marsh, that half-world between land and water. And few are the persons who attempt to solve these mysteries. Except for the naturalist and the sportsman, almost nobody

visits marsh or swamp. Too wet for walking, too dry for boating, these areas are generally considered dangerous, uninviting, and uninteresting.

But for those who learn to know them, marshes are marvelous homes for a wide variety of both plant-life and animal-life. Especially to the sportsman, a marsh means ducks and geese and muskrats—hours of happy hunting and trapping.

To a select few among modern-day hunters, a marsh can also mean rails, gallinules and coots. Each year the average hunter no doubt reads of an open season on these mysterious birds, scratches his head in wonder, and promptly proceeds to wait for later seasons and more popular game. For that small and diminishing minority of sportsmen who do head for the marshlands in September, however, the seasons set by the U. S. Fish and Wildlife Service hold special meaning.

The marsh bird family includes 180 separate species of rails, gallinules and coots with about 15 species occurring in North America. Rails are secretive, shy birds, with long, well-developed legs and short rounded wings. The Sora rail, depicted so well on this month's cover, breeds from British Columbia to Hudson Bay south to California and Maryland. They winter from California to Florida and south to Venezuela and Peru. They are seldom seen except when flushed and even when forced to fly, their flight is short, with legs dangling, and they quickly drop back into the protective vegetation of the marsh.

Can so easy a mark be classified as a game bird? Most people might think otherwise but those who have hunted them have discovered not everything is as easy as it looks. Rail shooting is a real test of a man's ability and courage. It takes a bit of nerve to tramp through sucking ooze and quaking vegetation. Even those who pole a flat-bottom boat into tidal marshes in quest of railbird shooting quickly find the going rough. And despite its slow flight, the rail is not an easy mark. By the time the gunner gets into shooting position and takes aim, the rail is probably dropping like a stone back into the reeds. And so many a railbird hunter returns at the end of a day hot, frustrated, wet and with aching muscles. For those, however, who do manage to bag a bird or two, the rail is a tasty dish, the eating thereof well worth the effort.

Mysterious is a marsh and many are its unsolved problems. Not the least of these is the Sora rail, a bird that is hard to picture as game but a tantalizing target nonetheless.



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SEPTEMBER, 1959

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Cover Painting  
By Margaret Blair

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# Hope For Hunting

**I**N 1958 nearly 15 million hunters took to the color-splattered fields of autumn. Millions bagged quail and deer, duck and rabbit; millions brought home nothing but a jauntier step and a clearer eye after a few hours or days under an Indian summer sky.

The nation was richer for this outdoor experience—richer in healthier and happier citizens, richer in jobs and industries providing goods and services to hunters.

Soon the pulse of the hunter will again quicken to the first hint of sharpness in the air as another hunting season unfolds. But thousands of hunters will find last year's hunting grounds blocked by a thicket of "No Hunting" signs put up by an ever increasing number of landowners as a last defense against the minority of slobs in the hunting ranks who threaten the sport of all. With each sign posted, the end of our tradition of free public hunting comes closer to reality.

The Izaak Walton League of America has given responsible sportsmen the opportunity to preserve this tradition by actively participating in its tried and tested hunter-education program—Hunt America Time. It gives every hunter the chance to "Be a Sportsman—Hunt With Sportsmen." He does this by pledging in writing his promise of decent conduct afield; by displaying a badge identifying him as one pledged to sportsmanlike conduct; by actively working with other hunters and with landowners to curb and control the minority of vandals; and by insisting on the highest possible standards of sportsmanship from his hunting companions while in the field.

Is hunting really worth worrying about? Certainly—if only as a source of physical exercise for soft-living 20th Century Americans. Psychologists have written reams about the "blow-



ing-off-steam" value of outdoor sports. Businessmen, who share a multi-million dollar jackpot antied up by hunters every year, will quickly answer "yes!" But the genuine hunter himself is the sport's best testimonial—the man who is a better man, the boy who's helped in becoming a man, through contact with nature in the ancient and satisfying ritual of the chase. A good outdoorsman is a man in harmony with his world.

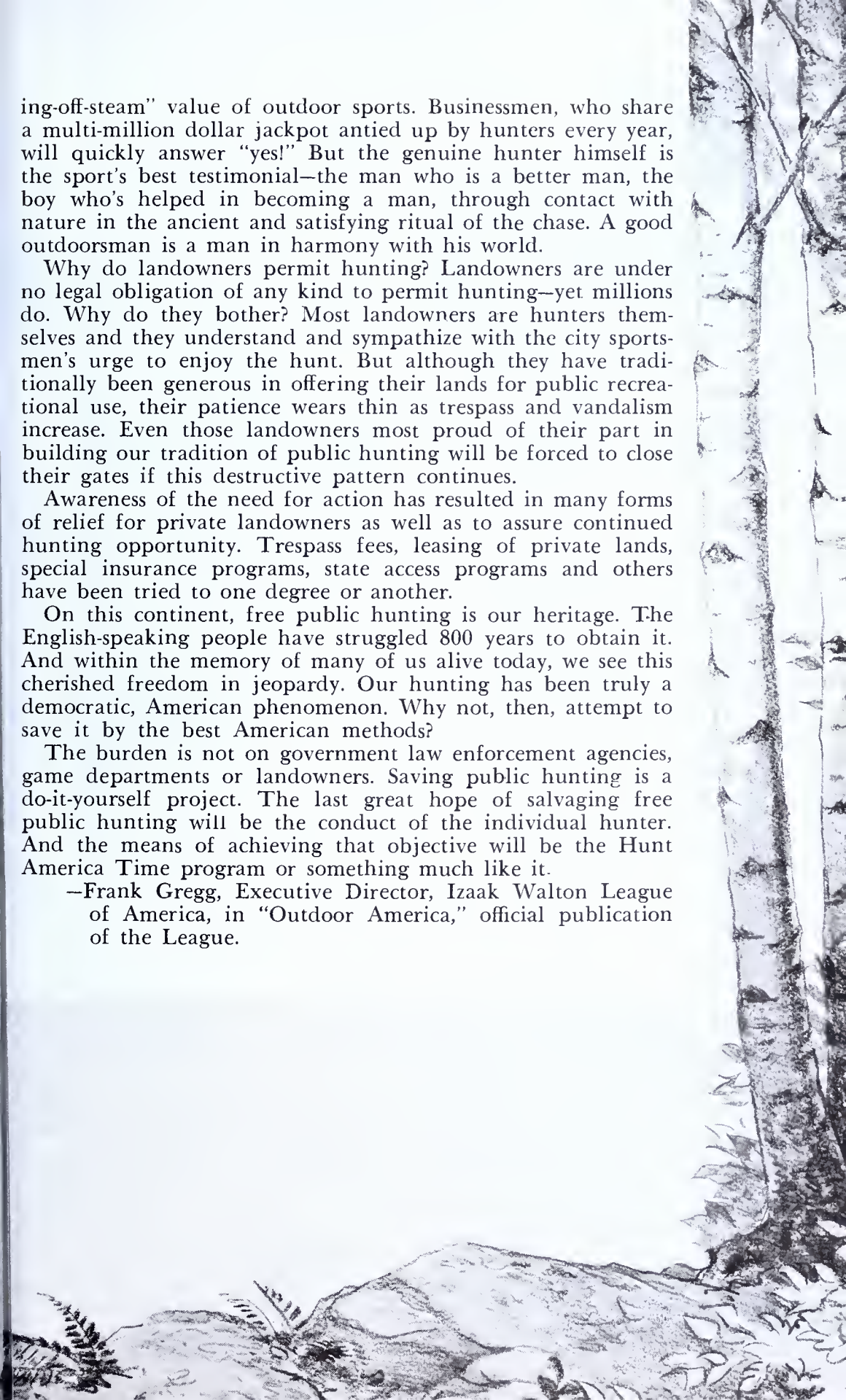
Why do landowners permit hunting? Landowners are under no legal obligation of any kind to permit hunting—yet millions do. Why do they bother? Most landowners are hunters themselves and they understand and sympathize with the city sportsmen's urge to enjoy the hunt. But although they have traditionally been generous in offering their lands for public recreational use, their patience wears thin as trespass and vandalism increase. Even those landowners most proud of their part in building our tradition of public hunting will be forced to close their gates if this destructive pattern continues.

Awareness of the need for action has resulted in many forms of relief for private landowners as well as to assure continued hunting opportunity. Trespass fees, leasing of private lands, special insurance programs, state access programs and others have been tried to one degree or another.

On this continent, free public hunting is our heritage. The English-speaking people have struggled 800 years to obtain it. And within the memory of many of us alive today, we see this cherished freedom in jeopardy. Our hunting has been truly a democratic, American phenomenon. Why not, then, attempt to save it by the best American methods?

The burden is not on government law enforcement agencies, game departments or landowners. Saving public hunting is a do-it-yourself project. The last great hope of salvaging free public hunting will be the conduct of the individual hunter. And the means of achieving that objective will be the Hunt America Time program or something much like it.

—Frank Gregg, Executive Director, Izaak Walton League of America, in "Outdoor America," official publication of the League.





# WALKIN' SHOES

By NED SMITH

## Game Birds of the Wet Places

1. What game bird is called the "timber-doodle?"
2. Rails are rather weak fliers. True or false?
3. How do the coot's feet differ from those of most other birds?
4. A federal stamp is required to hunt rails, gallinules, woodcock, sora, coots, and snipe. True or false?
5. What two long-billed rails found in Pennsylvania resemble one another very closely except for size?
6. What bird is commonly referred to as the "mud hen"?
7. What is the difference between the Wilson's snipe and the jack snipe?
8. What is the woodcock's favorite food?

**W**HAT was the first thing you looked at when you received your copy of the open seasons and bag limits for migratory game birds—the regulations concerning ducks and geese? That's what most Pennsylvania hunters do. And I'll bet you skipped over the seasons on sora, rails, gallinules, snipe, and coots as though these birds were extinct.

Most of us do that, too, and that's where we're missing some rare sport—some of it available before the more popular species become legal game. Rail hunting, for instance, is lots of

fun. The shooting is not too difficult but it's good for sharpening the shooting eye until the mallards and blacks are in season. Coots are fun, too. On several occasions when business was poor at the duck blind we've run a nearby flock of "mud hens." The shooting kept our swing and lead from getting rusty and with a little kitchen know-how the birds provided some tasty meals. For real gunning thrills you should try snipe and woodcock. These tricky fliers are true game birds in every sense of the word.

Because most of these birds of the wet places are seldom seen they are presumed to be scarce as turtle feathers. Some are really not plentiful in Pennsylvania, but others are more common than you would think. If there's a good-sized soggy or water-covered area in your neighborhood it might be worth your while to don hip boots or launch a small boat—whatever the situation demands—and do a little investigating. You might be pleasantly surprised to find some of these birds close to home:

**1. King Rail**—Although considered a rare bird in Pennsylvania the king rail could conceivably be more plentiful than supposed. It is an extremely secretive bird, seldom leaving its swampy bailiwick where it slips easily through the grasses that hide it from view.





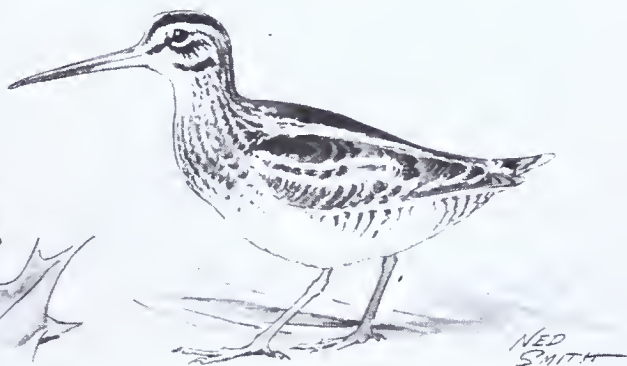
COOT



FLORIDA  
GALLINULE



WOODCOCK



WILSON'S SNIPE

Flight is obviously an effort for the king rail. It rises on short rounded wings, long legs dangling behind it, and flaps but a short distance before plummeting into the swamps again as though completely exhausted. Shooting rails requires little skill with the scattergun, for they offer an easy target. **Getting** a shot is the tough part, for they are hard to find and harder to flush.

The "marsh hen" is a handsome bird—reddish brown in color, except for his belly and under tail coverts, which are white heavily barred with broad ashy brown bands. The upper parts are streaked with dark grayish

brown. The bill and legs are rather long, the feet large. A stubby excuse for a tail twitches nervously at the end of its compressed body.

Much of the king rail's diet consists of various seeds—the animal content being made up chiefly of worms, insects, leeches, crayfish, tadpoles, and the like.

2. **Virginia Rail**—This small version of the king rail is more common in our state than its larger relative, although like all rails it remains hidden in the cattails and sedges most of the time and is seldom seen. Unlike "good children" of another generation, Virginia rails are more

often heard than seen. Their chattering and grunting conversations can be heard throughout the day in any swamp they inhabit.

Aside from size the Virginia rail can be distinguished from the king rail by its gray cheeks—those of the larger bird being brown. In food preferences, manner of flight, nesting habits, etc., the two birds are strikingly similar.

The Virginia rail's six to twelve speckled eggs are laid in a grassy nest that is generally built in a clump of swamp growth. Most often it is situated on land, but occasionally is located over the water.

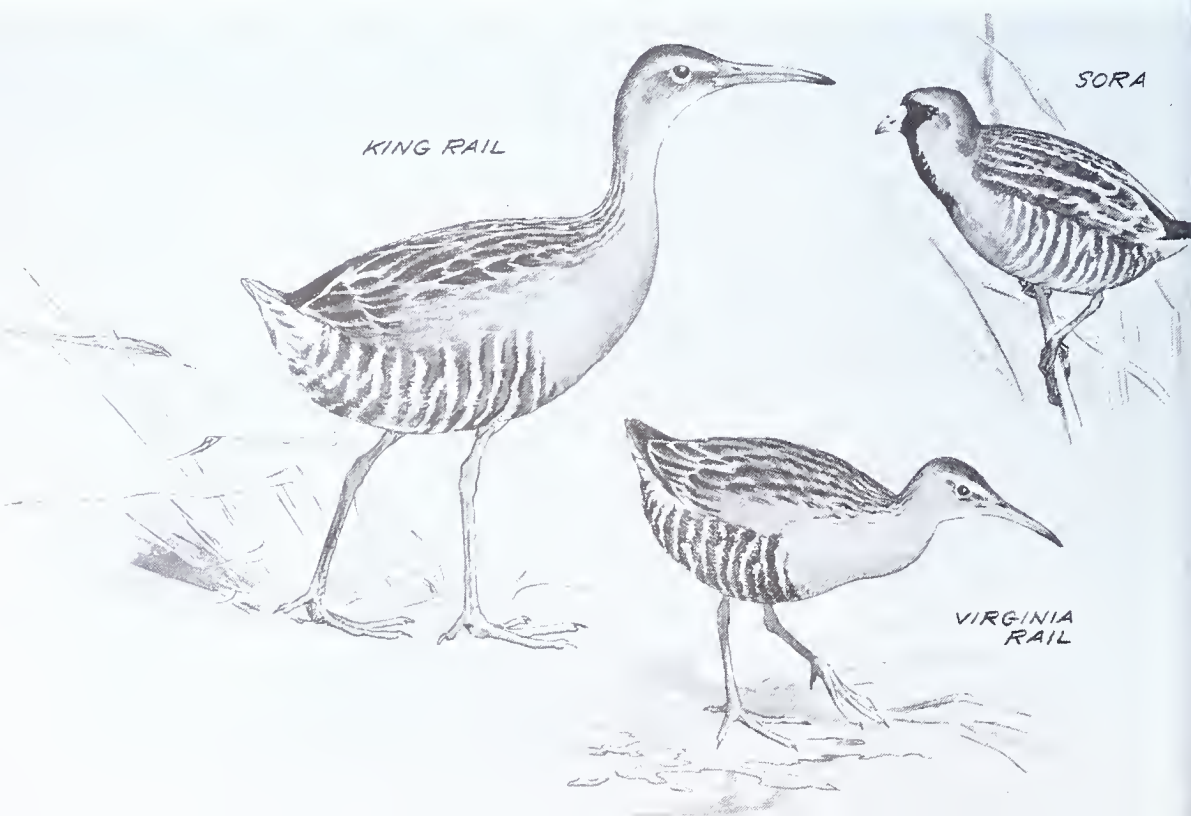
**3. Sora**—This tiny rail is the species most eagerly sought by gunners. In coastal areas soras are hunted during the high tides of autumn by poling a small boat into the flooded vegetation of the fresh water marshes. A paddle slapped against the water will immediately bring protesting cries from every sora in the vicinity, enabling hunters to locate nearby concentrations of birds. Unfortunately for the soras, they are easy targets and their small breasts are considered second to none in flavor.

The most obvious difference between the sora and the preceding rails is the former's short bill. In coloring, too, it is quite different. The head, neck, breast, and chest, are slate gray. The rest of the underparts are white widely barred with blackish. The upperparts are brownish gray, marked with black and narrowly streaked with white. The bill is yellow. A black area surrounds the base of the bill and extends in a stripe down the front of the neck.

The sora makes a lot of noise for its size. A loud whinny, descending in pitch, is often heard, and a shrill peep is the usual alarm note.

Aside from the three rails mentioned, two sparrow-sized species, the black rail and the yellow rail have in rare instances been recorded in Pennsylvania.

**4. Coot**—Among the duck hunting fraternity the coot is better known as the "mud hen." It is bluish gray in color, darker on the head and neck. The under tail coverts and the tips of the secondary wing feathers are white, and the bill is ivory-white with a few brown markings. A distinctive feature is the peculiar scal-





loped lobing of the greenish feet.

Coots are truly the clowns of the water. Consorting in large flocks, they splash like a bunch of kids in a swimming hole, or scamper over the mud flats looking for food in a near-sighted manner. They are good swimmers and divers, and spend lots of time in the water, carrying on a lively conversation of grunts, coos, and cackles. Coots rise from the water with difficulty, noisily running over the surface for some distance before their madly flapping wings lift them clear of the water.

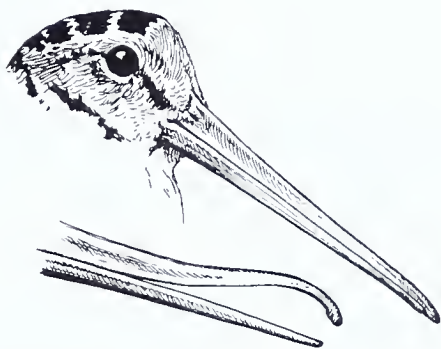
Although the coot rarely nests in Pennsylvania it is common during the spring and fall migrations. A few are killed by duck hunters who "want to hear the gun go off" but practically no one intentionally hunts them because of the inferior quality of their meat when prepared in the usual manner. Only a kettle slinger well versed in coot-cookery can turn the despised mud hen into a satisfactory dish.

**5. Florida Gallinule**—Somewhat smaller and slimmer than the coot, the Florida gallinule can be distinguished by its browner back, red bill and frontal plate, and white stripe at the edge of the breast feathers. The feet are large, but not lobed like the coot's.

The gallinule is not fond of large areas of open water, but prefers the cover of cattail, arrowhead, and other aquatic vegetation.

Although it swims well, it feeds chiefly on land or while daintily picking its way across floating lily pads or spatterdock. Like the coot, it jerks its head with each step, or in the case of a swimming bird, with each stroke. The most common note is a frog-like "kruk."

How common is the Florida gallinule in Pennsylvania? It is thought to be rather scarce, particularly during the summer. Nevertheless, as with other secretive swamp dwellers it might be more plentiful than we realize.



*BILL OF WOODCOCK SHOWING HOW UPPER MANDIBLE CAN BE MOVED INDEPENDENTLY OF THE LOWER*

**6. Woodcock**—The big-eyed "timber-doodle" is undoubtedly the best known bird of this group—the result, I suppose, of wide distribution, choice of habitat, and sporting qualities. It is a droll-looking creature—plump and squatty, with short legs and feet that seem a few sizes too small. Few birds have a proportionately longer bill, and the eyes too are enormous and placed far back on the head. The plumage, on the other hand, is singularly attractive. The underparts are cinnamon-buff; the upperparts are a beautifully mottled bit of brown, black, gray and buff camouflage. It is a fact that the incubating female places such implicit faith in her protective coloration that she frequently allows herself to be touched while on the nest.

In contrast to other birds in this article, the woodcock is more at home on *terra firma* than in water or watery places. Low-lying alder swales are his first choice, although flight birds make themselves at home in crabapple thickets, under hillside birches, and other places where the soil is rich, soft, and loaded with earthworms. The latter are his favorite food, and are obtained by probing with his long bill. The tip of the upper mandible can be moved independently of the lower, forming an effective instrument for grasping

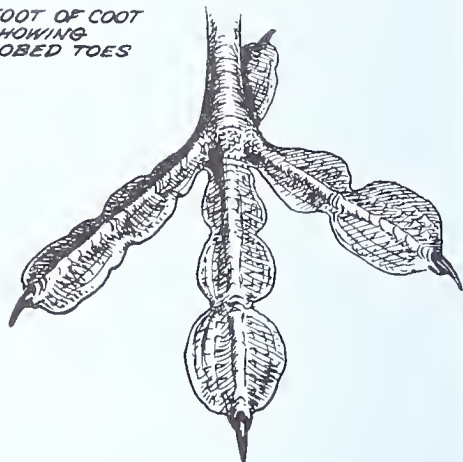
and withdrawing worms from their sugterranean galleries.

A real game bird should lie well to the dog, present a sufficiently difficult target when flushed, and provide a mouth-watering morsel on the table. The woodcock does all these remarkably well. Perhaps that's why many confirmed woodcock hunters are lukewarm where other game is concerned.

**7. Wilson's Snipe**—Slenderize the woodcock, lengthen his shanks, white-wash his underside, paint his upper-parts with a bold black pattern and you'll have a pretty good imitation of the Wilson's snipe, or jack snipe. Like his portly relative, the snipe finds much of his food by probing with his bill. Favorite haunts are grassy swamps, particularly those adjoining rich mud flats. Here he hides until daylight fades, then ventures into the open for dinner.

The flight of the snipe is swift and erratic, following a zig-zag course that drives gunners mad. As food, the bird is one of the best.

FOOT OF COOT  
SHOWING  
LOBED TOES



### ANSWERS TO THE QUESTIONS

1. The woodcock.
2. True. They fly neither fast nor far.
3. They are fitted with scalloped lobes.
4. Check your federal regulations. Most of these birds can be hunted without a federal stamp.
5. The king rail and the Virginia rail.
6. The coot.
7. They are the same bird.
8. Earthworms.

# HUNTERS

Respect Private Property

Save Public Hunting



**HUNT AMERICA TIME**

A CONSERVATION EDUCATION PROGRAM OF  
THE IZAAK WALTON LEAGUE OF AMERICA







# Does Your Shotgun Shoot Where It's Looking?

By John B. Miller

**I**'LL GIVE a hundred bucks to the fellow that will tell me exactly how many chagrined hunters, as they watched a ringneck rooster sail across the next field without shedding a feather, or a bunny dive into a brush patch with his furry hide intact, have sputtered something like: "I'll bend this blank-dashed gun barrel right around the next ding-danged tree I come to." Of course my money is safe, for there's no way of arriving at such a figure, but I'll bet a one-armed man can't count them on his fingers. As a matter of fact, bending it might be a good idea, but the tree method is not recommended. More of that later.

A year or so ago I was handed the job of testing and reporting on a group of low and moderately priced shotguns for a consumer's organization. Because of time and money limitations, these tests could not be exhaustive. They were intended, rather, to disclose any apparent or major faults and weaknesses and give the prospective purchaser, who was assumed to be unfamiliar with the technicalities of such matters, some guidance in selecting a weapon for hunting purposes. All weapons were new when received, most of them coming directly to me from the manufacturers. The guns were examined carefully for manufacturing and assembly

defects when unpacked and cleaned. Such design items as safety features, pleasing outlines, etc., were noted at that time. Ease and simplicity of loading, unloading, and cleaning was evaluated. Forces required to operate the actions and fire the weapons were measured. Stock dimensions were measured and recorded. Finish of wood and metal parts was examined critically. General design features were evaluated from an engineering standpoint and from the standpoint of safety, "feel," and durability. General comparisons were made between guns in comparable classes. Then came the actual tests which, although limited, did reveal a number of interesting facts about modern scatter-guns.

Each of the seventeen guns was patterned with three different loads, namely: the standard trap load, a heavy or "high brass" load of number four shot, and a corresponding load of number sixes. If initial patterns were poor or misplaced others were fired as checks, in some cases using a different brand of ammunition. Obviously, still more tests would have been in order and would have given more accurate information.

The test patterns were fired at blank sheets of news print paper which measured thirty inches by forty-four inches—none too large, but adequate for the purpose at hand. A black target paster was stuck in the center of each sheet to serve as an aiming point. The patterns were fired from a distance of forty yards, using my very best offhand rifle shooting aiming and trigger squeeze technique. Incidentally, those of you who think you are pretty tough customers might just try shooting from thirty to fifty *aimed* shots, using heavy loads in light, field grade, twelve-gauge guns, at one session. It's a lot different than shooting a couple of rounds over the traps or a dozen or so shots at live and moving targets. I'll practically guarantee you'll know you've done some shooting.

What did I learn from this? Well, aside from finding which gave good patterns and which gave poor ones, I found that many of them just didn't put the center of their shot patterns where they appeared to be pointed. As might be expected, the cheap, bolt-action jobs were—as a class—the worst offenders in this respect, although one of them was right on the button. Another of them consistently placed the center of impact of its pattern a long twelve to fourteen inches at about four o'clock from the point of aim. If we consider a standard pattern to be thirty inches in diameter this means that the point of aim of that gun would be practically out of it! But hold on! One of the newest and most expensive semi-automatics had a consistent error of about ten inches at the standard range. If I

FORTY-YARD PATTERN fired from a 12-gauge shotgun with BB shot. Black paster in center is one-inch square. Center of impact of the pattern, deliberately displaced to illustrate the point, is estimated about the cross mark. Note the large and numerous "holes" in the pattern, which is the main reason why most experienced hunters use smaller size shot, even for big game birds.





hadn't made the pattern test first I'd have been almost certain to have concluded that the difficulty I experienced in hitting clay birds with that gun in later tests was due to its poor weight distribution and balance. As it was, by correcting my holds to compensate for the errors in the guns, I was able to hit the clays fairly well—for me—with any of the guns, in spite of their off-center shooting.

Each of the guns was fired from ten to twenty times at clay birds thrown from a regular trap and the performance and feel, as well as the actual results, noted for comparison with the others in its class. Those that appeared to give poor results were fired more than those that did well from the start. That was hard to make myself do, for it's more fun to shoot those you can hit something with.

No, the results of that series of tests didn't exactly astonish me. I've known for years that all is not gold

that glitters and, likewise, that not all guns—even expensive ones—shoot where they are supposed to. Several years ago, just after hunting with semi-automatic guns was legalized in Pennsylvania, I felt the urge to own one. About that time I had a chance to get one at a very nice discount thru some devious but legitimate channels and ended up with a new one with ventilated rib and all the rest of the works. As soon as I could get my hot little mitts into the package and clean the grease off the prize outfit I shanghaied one of my sons to wave the hand trap and took off for an old field to see how she worked. My face got redder and redder as the misses on those easy, hand-thrown birds piled up until I had six in a row. I was about at the point of looking for a tree myself, or hunting up the pattern board, or maybe opening a shell to see if there was any shot in it, when I happened to fire with a hold that looked quite a bit too low. And that was the answer. By holding well down I could powder them with satisfying regularity, even though the pesky weapon did fail to function several times.

As soon as I could get the equipment together I patterned that scattergun of mine and discovered that the center of the pattern landed about eight inches high at forty yards. I'll grant that eight inches error at forty yards doesn't excuse me for so much missing—I must have been doing something wrong as well—but it certainly didn't help any. Incidentally, most of the seventeen shotguns in the batch previously referred to placed their patterns below the point of aim instead of above it as mine did. Only seven or eight of the lot centered their patterns close enough to the point of aim to be considered entirely satisfactory.

As a sidelight on my experience with my own gun I may add that I returned it to the factory at the suggestion of a friend who is in the employ of the company, but not in the

**FORTY-YARD PATTERN** fired from same gun using Number 4 shot. Note the greatly improved shot distribution. Even on larger varieties of game, the greater number of hits will more than offset the advantage of greater penetration obtained with BB shot.



manufacturing end. Those birds at the plant sent it back with the cryptic remark that "It is in what we consider to be satisfactory adjustment," and charged me five bucks plus transportation for the information. I pretty well cured the difficulty myself by putting on a chunky, high, front sight and changing the drop a bit.

About this time some of the real shotgun shooters, which I am not, will, if they have read this far, blow up and say: "Doesn't this poor dope know that you don't just aim a shotgun?" To this I will reply: "Yes, Brother, I am well aware of that." Generally a shotgun is "directed"—not by radar, as some people seem to think—but by a combination of pointing and aiming. The amount of each of these varies from the dead aim required to pick a half hidden squirrel out of the leafy top of a big white oak at thirty or forty yards to the instinctive point frequently used when snap shooting at grouse or quail in thick cover. To collect the squirrel your gun will have to shoot about where it's looking and you'll have to squeeze off the shot about as you would with a rifle. To eat grouse with any degree of regularity your scattergun must have that mysterious thing called "fit." For either extreme you will be looking down the barrel and it must center its shot charge about where it appears to point.

"Fit" is a function of such stock dimensions as pitch, length, drop, and cheekpiece thickness—to mention a few—as well as weight distribution and general balance. I don't propose to get involved in any arguments over this vague and mysterious factor, but there are a few good gunsmiths who can rig up a stock to fit almost anyone. They have the know-how and the equipment to make the necessary tests to determine what a particular shooter needs and can make a stock to meet those requirements.

Factory stocks are made to fit the "average man" and darned few of us are average in all respects. Usually I need a bit more drop than these stocks provide, and sometimes just a little more length. Although the stocks on that bunch of guns I tested appeared, to the tape measure, to be quite uniform, some of them quite definitely fitted me better than others. There was one light little pump job that came up so naturally and performed so well for me that I just about cried when I shipped it back to the factory—and I wouldn't have returned it except I was afraid I'd get caught if I stole it and I needed to buy another about as much as I needed a few more holes in my head.

At this point, and before we go any farther, I'm going to repeat something that about every writer on shooting matters has said at one time or another ever since I learned to read. That is merely that the only way you can find out what your particular gun is doing is to try it for yourself. Any really good shooter may be able to give you some idea how it is performing, but only *you* can tell how it shoots for *you*. I don't own a nickel's worth of stock in an ammunition company, so I'm not telling you this to sell more ammunition. It's the gospel truth. Shoot it on paper or clay targets until you know what it can do, or what it needs to make it perform. Shots at game, at least in my territory, are too few and far between to be wasted experimenting.

Set up a good big, clean, sheet of paper against a safe backstop at about forty yards, if you are using a full choke or modified gun in one of the larger gauges. With improved cylinder or "skeet" borings twenty-five or thirty yards may be better. Put a clearly defined aiming point in the center of the paper, hold as close an aim as possible, and SQUEEZE off the shot. Don't grab a hasty aim, take both feet off the ground, yank the



trigger back through the pistol grip, and then expect to get a thing out of it except a sore shoulder or a bloody nose. And don't take the results of the first shot fired as the ultimate truth. Fire several more under the same conditions, each at a clean sheet of paper, to get a better picture—or shall we say “just for kicks.” Now examine the targets carefully and note where you estimate the center of impact to be on each of them. If you've fired properly you'll find that it either is where it should be or it appears in some other location with fair consistency. If it is more than three or four inches away you may want to start thinking about some corrective measures.

After the tests of the last paragraph it is a good idea to run another series, performed the same way except that now you throw the gun to your shoulder as you might when game appears suddenly in the field, firing as the piece seems to line up with the target, but still using a SQUEEZE, although a fast one this time. If the weapon still puts its center of impact where you want it you are a lucky man and are ready to graduate to the traps or the skeet field. If it doesn't the fault probably lies in the fit of the stock—unless the first test indicates trouble with the deliberately aimed shots also.

“So,” you say, “both tests indicate that she shoots a good foot south by east. Where do I go from here?” There, my unfortunate friend, is where the advice of the first paragraph of this epic comes in. You bend her, but not around a tree. And not yourself, unless you are an exceptionally good gunsmith and have the proper tools and experience. These bends have to be made in the right direction, at the proper points, and in just the right amount. It's not a job for the old country blacksmith that has an anvil, a hammer, and a yen to hit something. Take it to the finest gun artisan you can learn about. He may not bend the barrel.

He may want to alter stock dimensions, or he may want to send it to the manufacturer for alterations.

“But,” you argue, “what will a few bends at various places do to the patterns?” My most educated and considered guess is that, if properly done, they will not affect them at all. It's the front one to four inches that determines the density of the pattern and the direction it takes. Of course I wouldn't recommend putting a ninety degree bend in the barrel of your pet fusee just to get that squirrel that always manages to be on the other side of the tree. A correction of a foot at the forty-yard range calls for a change of direction of about half a degree, which isn't much. It's very doubtful if you'd ever notice it unless it happened to be square sideways and you knew it was there in the first place. That isn't saying you bend the barrel thru that angle—it's a bit more complicated than that because the front sight goes along with the front of the barrel—but that gives you some idea of the amount of bend under consideration.

So, if you are one of those fellows that's always making threats like those of the first paragraph, don't wait until the day before hunting season and then call an ambulance to get your scattergun to a gunsmith in a hurry so he can doctor it up for you. Make a few tests right away and then, as they say, “Take appropriate action.”

NOT RECOMMENDED is this method of bending a shot gun barrel.





# Brittany Beachhead

By Brooke Focht

**V**IRTUALLY unnoticed by the average hunter, there has been a gradual invasion of the meadows, swamps and corn fields of south-eastern Pennsylvania's famed "pheasant belt" during the past four or five years.

The "invader," while destined to give many a wily cock pheasant a rough time, is not a savage predator. Instead, it is a lovable, happy, almost funny looking dog—the Brittany spaniel.

For the benefit of those who haven't seen one, the Brittany is a spaniel that points rather than flushes game as do the cocker and springer spaniels. Brittanys were introduced into the United States from France soon after World War II.

Generally orange and white, sometimes liver and white, the Brittany has dense, flat or wavy hair not as fine as other spaniel breeds. A com-

pact, closely knit dog of medium size, the Brit is a leggy spaniel with the appearance of agility and ability to cover ground. He looks—and is—speedier than the other spaniels. A typical Brittany is strong, vigorous, energetic and quick of movement. A large male may weigh 40 pounds and stand perhaps 20 inches at the highest point of his back.

Show standards of the breed specify a four-inch docked tail. But many experienced Brittany gun dog fanciers prefer a tail at least six inches long. This gives trainers a hand-hold when steadying or styling the young dog on point.

Even the dog's stoutest supporter, if he wants to be honest, would not call the Brittany a pretty dog as compared to the English pointer or setter. The happy demeanor and fluffy appearance of the Brit appeals especially to women and children who



generally want to cuddle every Brit they see in their arms. And, Mr. Sportsman, if you are thinking of taking a Brittany pup home, don't hesitate. One look from a Brit's limpid eyes, a few energetic wags of its stumpy tail, and even the most determined housewife will insist that you bring it into the living room. Children and Brittans seem to gravitate toward each other like a hungry bass hurries to a juicy minnow.

None of the dozens of Brits I've seen displayed any evidence of the nervousness and short temper of so many of today's cockers. Let's hope the Brittany spaniel fanciers continue to breed them primarily for hunting and companionship and refrain from willy-nilly mating which could spoil the breed's even temperament.

During the 21 years I've been writing an outdoors column I've learned the importance of testing before even casually endorsing any equipment used by hunters and fishermen. But I'll go 'way out on that proverbial limb now by stating that I feel the Brittany is an ideal dog for bird hunting in today's rapidly shrinking cover in the Northeastern states.

Remember, this endorsement comes from a guy who has owned good English pointers and setters all his adult life. In my opinion there is nothing that will stir your blood as much as a classy pointer skidding into an intense point in mid-stride while bounding across a field.

As long as I compete in bird dog field trials I shall have at least one pointer in my kennel. Brittans will always have a tough job winning all-breed bird dog stakes against bigger and wider-ranging pointers and setters. But things have changed for me recently. I have attained that allegedly silver-lined plateau at which life is supposedly to REALLY begin—40. Perhaps life does begin at 40 for some folks, but not for the average bird hunter! For the first

time last fall I noticed that the familiar hillsides where my buddies and I seek the elusive ringnecks seem to have become steeper. And those hurried approaches to pointing dogs down at the far edge of the corn fields leave me huffing and puffing like a politician after a campaign speech.

My hunting buddy, Harold (Porky) Rabold is five years my senior. He noticed these symptoms of middle age some time ago. When Bess, his classy but wide ranging pointer bitch, died of old age last year, Porky promptly did something about it. He purchased Roustabout Mike, a two-year-old Brittany. Porky was so pleased with Mike that not long after a female Brit puppy named Liz occupied the other half of the Rabold kennel.

It was a few chance remarks by me that led Porky to try a Brittany. After reading stories about the breed's abilities and seeing a good one work at a field trial a few years ago I predicted that these dogs would become popular in the re-

BRITTANY WITH BELL is a favorite combination for hunting, especially for finding woodcock in thick cover. When the bell stops ringing, chances are the dog has found a bird and is on point.



stricted bird hunting areas of the northeastern United States.

I woke up to the growing popularity of the breed during a gab-fest with Al Bachman, who is in charge of all farm-game cooperative projects for the Pennsylvania Game Commission. Bachman is a dog man from 'way back. The kind of fellow whose dogs must produce if they expect to stay in his kennels.

In his job Bachman probably con-

tacts more hunters and landowners than anyone else in Pennsylvania. He routinely visits many pay-to-hunt and private bird shooting preserves. Operators of these preserves just cannot afford to have wild, crazy-running dogs which flush all the birds off the place. The success of their places depend, to a large part, on how many birds are shot on their grounds.

After proving to his own satisfaction that the Brittany is a real meat

CLOSE WORK between hunter and dog made possible this fine hunting scene. Brittany spaniels do not range widely but work the cover over thoroughly within gun range. A typical "Brit" is strong, vigorous, energetic and quick of movement.







Photo by Evelyn Shafer

FOUR NATIONAL CHAMPIONS are posed for their picture during the 14th annual field trial of the American Brittany Club at Carbondale, Illinois in 1956.

dog, Bachman advocated their use on the preserves. He has even loaned many of his young dogs to preserve operators so the dogs get the all-important experience necessary to finish them as shooting companions. In a short time these preserve operators find that the Brit seems to be the type dog best suited for their purposes. Many of the dogs which Bachman loaned to preserve operators have never left the place again. They are purchased as important additions to the operators' staffs.

Talks with Bachman and the few Brittany fanciers I encountered at field trials stirred my interest in the breed. If you're the type who likes to see a brush-busting dog whip across a field at high speed, forget about the Brittany. He is a close-ranging, thorough workman who does everything a good setter or pointer does—but does it all within gunshot range.

You say that you must have a wide-ranging dog to nail down those smartest cock pheasants? I guess per-

haps you're right. But I have found that most of the real wise old ring-necks get away no matter what kind of a dog you pit against them.

I have seen three really "class" Brittany in action during the past hunting season. And I would be happy to own any one of them right now. One of these class Brits is the aforementioned Roustabout Mike. Another is his litter-brother, Roustabout Pat, who is the "brag dog" of Wayne Wertz, operator of a public shooting preserve, the Strausstown Pheasant Farm, in Berks County. The third class Brit is Robin, top dog in the string of Weldon Weidner, operator of the Reading Regulated Shooting Area, which is generally recognized as one of the top public pheasant shooting preserves in the East.

Weidner's 400-acre preserve and its natural hunting conditions won for him a prize offered by a Philadelphia sportsman's club as the man who did more for hunting in Pennsylvania in

1958 than any other individual. Weidner started operations with a kennel of all breeds of pointing dogs. Today, after several years of operation, he does not hesitate to tell you that his best all-around dogs are his Brittanys.

A special kind of dog is required for the public shooting preserves where the dogs must hunt for many inexperienced nimrods. Many of the customers have never hunted over a pointing dog before. So the public preserve dog must do just about everything but pull the trigger for some of the greenhorn shooters. Weidner claims that his Brits have converted scores of skeptics to the value of a close-quartering pointing and retrieving dog.

I make no elaborate claims for the Brittany spaniel. He is just a good, honest, mild-mannered and efficient bird dog. Most of them will never attain the brilliance of a pointer or English setter, but they'll really help you fill your game bag. And that is all the average hunter expects from a bird dog.

Two imported bird dogs—the German shorthair pointer and more recently the Weimaraner—were victims of elaborate build-ups in which they were touted as having super noses, extraordinary intelligence and Lord knows what else. That kind of propaganda hurt these two breeds because many inexperienced hunters purchased one of them and expected it to perform miracles in the field.

Dogs, regardless of breed, are just like us humans. Some are smart, others are "dumb;" some are energetic, others are lazy; some are sweet-natured, others are as mean as a city editor with a hangover.

The best hunting dogs are those that get the most training and work-outs in the field. Just like top athletes (actually, hunting dogs are professional athletes who get food and lodgings in lieu of big salaries for their performance) dogs must be kept

in the pink of physical condition. Regular trips afield keep them in top working form.

Let's consider Roustabout Mike, for instance. He was purchased from Harvey Gring, one of our area's most successful meat hunters. Porky and I went to Gring's home to look over a litter of advertised Brittany pups. Our attention, however, was attracted to the energetic male dog who bounced all over Gring's back yard. Porky wanted Mike even after Gring told us the dog had not been hunted often.

After some dickering back and forth and a field demonstration, Mike, then just two years old, went home with Porky. That was just a week before the bird season opened. By the middle of the season Mike was pointing his own birds, backing my pointers, and retrieving the birds and cottontails we shot. Despite a shortage of legal cock pheasants in our gunning territory this fall Mike has rounded out into what I consider a top shooting dog. Because he has hunted so much with my pointers and has a highly competitive nature, Mike's range is wider than that of the average Brit. Still, his range is not as consistently wide as the typical entry in a field trial shooting dog stake in this area.

Perhaps Mike is an exception. I don't know. But for my money he is just about the best ruffed grouse gun dog I've ever seen. We live in the pheasant country of Southeastern Pennsylvania, but just 20 miles to the north are the Blue Mountains, part of the Appalachian Range. Here, if you have the luck and know-how, you can get a fair day's shooting at ruffed grouse. Some years, like the hunting season just passed, you can move more than 20 different birds in a leisurely day's outing. That may not sound like good grouse hunting to those fortunates who live in real "pa'tridge" country, but it is good enough for Porky and me to give up





BOYS AND BRITTANYs go well together. Youngsters, like these lads, find that spaniels are easy to teach and can be faithful companions.

all our full days at pheasants and try for the grouse.

We've always used our pointers for grouse and have shot birds over their points. But let's face it, men. A good pheasant and quail dog is seldom a good grouse dog! My pointers, Trey and Dandy, are just too noisy and wide in the grouse woods. Then, too, the heavy undergrowth in our favorite grouse spots plays hell with the pointers' bellies. They return home from every grouse expedition as full of scratches as a love-sick tom cat.

Now with the Brittany's things are different. They don't crash hell-bent-for-election through the brush. Therefore they don't flush many of the grouse out of gun range on those days when the birds are inclined to be spooky. And the Brits' longer hair saves their skin from many of the scratches suffered by the pointers. The naturally closer range and slower pace of the Brittany means you do less whistling and yelling in the grouse woods. And if you've hunted those birds for any length of time you know that the quieter you are the better are your chances of getting a shot.

My first glimpse of the Brittany

spaniel was during the waning months of World War II while my army medical unit was stationed in Normandy. We were operating out of a former French tuberculosis hospital in a picturesque and fertile valley about 50 kilometers from Rouen. Just as regular as reveille, every Sunday morning would find bicycling Frenchmen, shotguns slung over their shoulders, heading toward the hedgerow-lined fields. And often trotting behind his master's bike would be a Brittany spaniel happily heading toward the work he loved—pointing the French partridge and big European hare which abounded in that sector.

Remember, this article was written by a dyed-in-the-wool pointer man who has not yet owned a Brittany. But I have hunted over enough of them to know just what you can expect.

Mike is scheduled for an assignation with a good Brittany bitch. And Porky has promised me a puppy. So Trey and Dandy had better get reconciled to sharing their kennel. And if the pup turns out like I expect their will always be a little bundle of orange and white animation along on my future bird hunting trips.



NED  
SMITH



# The Unmodified Bore

## PART ONE

By George Bird Evans

**I**N shooting, the problem of a bore is not limited to a shotgun barrel. And choke, while it may involve the muzzle of a gun, should often be applied to the man on the end of the stock.

It is nearly always the poor shot who takes chances. I was shooting recently on a preserve, sharing my setters with a companion whose gun habits were unfamiliar to me. A cock pheasant flushed, moderately distant and directly in front of me, and as it climbed steeply for the tree tops I evidently undershot it. With feathers showering down and both legs dangling it remained airborne but losing altitude as it disappeared behind some thicket.

I ran left for a clearer view, anxious to mark its fall and direct my dogs to the retrieve. I nearly got my head blasted off as my companion fired at what must have been a very tiny distant shape—the falling pheasant.

Running into a companion's line of vision is not advisable, but I was not aware that you shoot at another man's bird falling to earth 65 or 70 yards away from you. My dog retrieved the cock and my companion accepted it.

This man wouldn't have fired if he had stopped to think. Again that day I saw him shoot at a bird with his gun muzzle four feet from the shoulder of another gunner. Weeks later when viewing movies of this trip I shuddered to see this same man standing behind me, raise his gun and swing on a bird crossing in front of me—a bird I shot not realizing how closely I again came to having my ear ventilated.

This fellow would hate it if he comprehended what he had done, for he seems to want to do the sporting thing, but the birds weren't coming his way and he was just too eager. One slip is bad enough, three times in a morning puts him in the category of "accident-prone," and shooting with him is entirely too racy for me.

The safe man to shoot with is usually the expert. He isn't over-anxious and he knows where he is placing his pattern—two reasons why he is good. An additional advantage to gunning with a good shot: as at skeet, the timing and co-ordinated swing of a crack shot imparts a desirable rhythm to your own.

Another objectionable is the perfectly nice guy whose meandering muzzle, carried at horizontal, keeps singling you out in the field. Why can't these fellows learn that everyone doesn't share their eagerness for a Life Beyond, that the only safe direction for a gun to point is *up*?

Don't rely on a gun's safety mechanism (it is only the triggers, not the hammers, that are locked). Treat it like a fused bomb ticking to go off. If you must carry it hung over your arm when you're around others, keep it broken open if it's a double. If it's not a double, don't carry a gun that way unless you are alone—not even your dog is safe around a "droopy muzzle." Courtesy hint: It is always a nice gesture to break open your gun when approaching a landowner for permission to hunt. He has no way of knowing it is unloaded, otherwise, and standing it up in the corner of his porch is like hanging a stick of dynamite over his door while you talk.

When examining a gun, the practice of opening the breech to check that it is unloaded is a *must* that tags the experienced shooting man as definitely as considerate handling by the wood only, to avoid finger contact with metal parts.

For years I was guilty of a fool-hardy trick: carrying my double "off-safety" with the notion I was more prepared for a sudden shot. Most men would improve their shooting if they weren't quite so fast. The good

wing shot *sees his bird* before he mounts, not mounts and bangs before he really focuses. A fall on an icy boulder cured me, for though I tried to hold the gun upright the leverage whipped the muzzle down, pointing directly at Kay, my wife, behind me. It didn't, thank God, discharge.

So if you are discovering the pleasure of good sporting shooting—or are introducing a young son to the experience—see that you and he remember that a gun is a tube with an explosive charge, potentially lethal, and don't ask your shooting companions to risk their skin educating you the hard way.

Nowhere does a gentleman's agreement mean more than in the field, either between you and your game or between you and your companion. If squirrel hunters agree to limit shots to head shots, or hound men to kills at the end of a chase, or bird dog men to shots over points, then to break over is unforgivable.

My father and I had been invited to shoot quail by a country doctor who didn't let his practice interfere with his shooting (good judgement, to my thinking). I was fifteen and was impressed by his suggestion that we limit our kill to a bird or two apiece from each covey. It was a wonderful November Saturday afternoon with our old Nat—a great-great-great-grandson of both Count Noble and Gladstone—and the doctor's pointer doing lovely work together. Each of us had two or three birds.

The sun was dropping into the afternoon haze when both dogs froze in a corn stubble on a knoll with the russet mountain ridge behind them. At the covey flush all of us got shots. The dogs brought in the three or four quail, beautiful little things, and the doctor said he thought we should call it an afternoon and take no more. I was red-hot for another try but I liked his idea, even then, of placing a personal restraint upon







shooting rather than killing to fill a legal limit.

Unloading, I squeezed through a fence after him at the far end of the field. As he straightened, a single bobwhite lying tight burst out at his feet and as it sailed away I heard his gun crack. The doctor didn't wait for a retrieve but pocketed the bird and walked on. I followed him without a word. It was a trivial thing that didn't greatly alter the quail population that long-ago fall but it did tarnish my image of what I am sure was a fine man. A boy's respect or scorn often have a sharply defined borderline.

We've all done things impulsively that we regret—as a novice I once shot a grouse running on the ground and the years haven't erased the unpleasantness of that memory. Sometimes excitement blacks out judgment or good taste; sometimes it's unadorned greed that makes people do incredible things. Some men shoot at all flushes, no matter how distant, "to make them lie." This little trick may make them lie—as cripples that sailed over the ridge carrying spent pellets.

A charming fellow with a gun is the man who beats you to the shot that is clearly yours. It's the old competitive sporting spirit (there's less sportsmanship on the playing fields than some people care to admit) and the idea is to blast the bird shot, even if it ends without knowing who hit the bird—often with a mangled wad of bloody tissue and feathers. I have an otherwise likable friend who makes himself a nuisance this way—or used to. Come to think of it, I haven't shared a day's gunning with him for a long time.

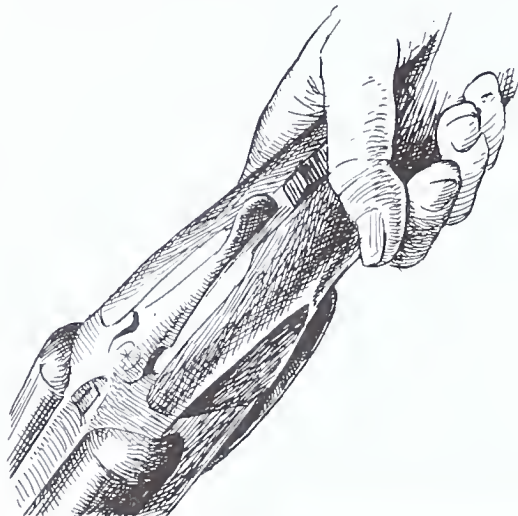
A man I know was shooting in the mountain foothills with the minister of his church. On a hillside ahead of the dogs he spotted two wild turkeys, necks extended getting ready to go places. Indicating the pair of birds, he insisted that the minister take the first shot. One of the turkeys sailed across in a pass shot and the minister dropped it. At the report of the gun the second turkey flushed and the gentleman of the cloth mounted his gun to swing on that one too. My friend saved him from a display of weakness and took the

bird before the minister pulled his trigger on empty air.

A deviation on the beat-you-to-the-shot type is the one who drops your bird after you have missed it both barrels. This shows brilliant shooting and is intended to make you feel just fine. It also presupposes that bird is a target to bust to prove marksmanship instead of being a wonderfully game little thing that has just won, for at least this time, what happens to be a very serious stake—its life. I don't think I hold a maudlin attitude toward shooting, but if you can't give your game a sporting chance I think you'd better stick to clays. If you must go afield in crowds, break up into pairs to do your hunting. Four or five men pitted against one piece of game seems to me a little out of balance. (And your insurance company will be happier if you don't hunt in crowds.)

There is also the good shot who is kind enough to fill out your limit after he has shot his own. He knows you only hunt for the meat so he saves you the ammunition and effort. He has a few admirers who spread his legend—"By the end of the second week Jo-Jo had killed twice the season's limit." In my book they're all in the same chapter and I'm not wasting time with any of them—once we get acquainted.

The boys with the competitive



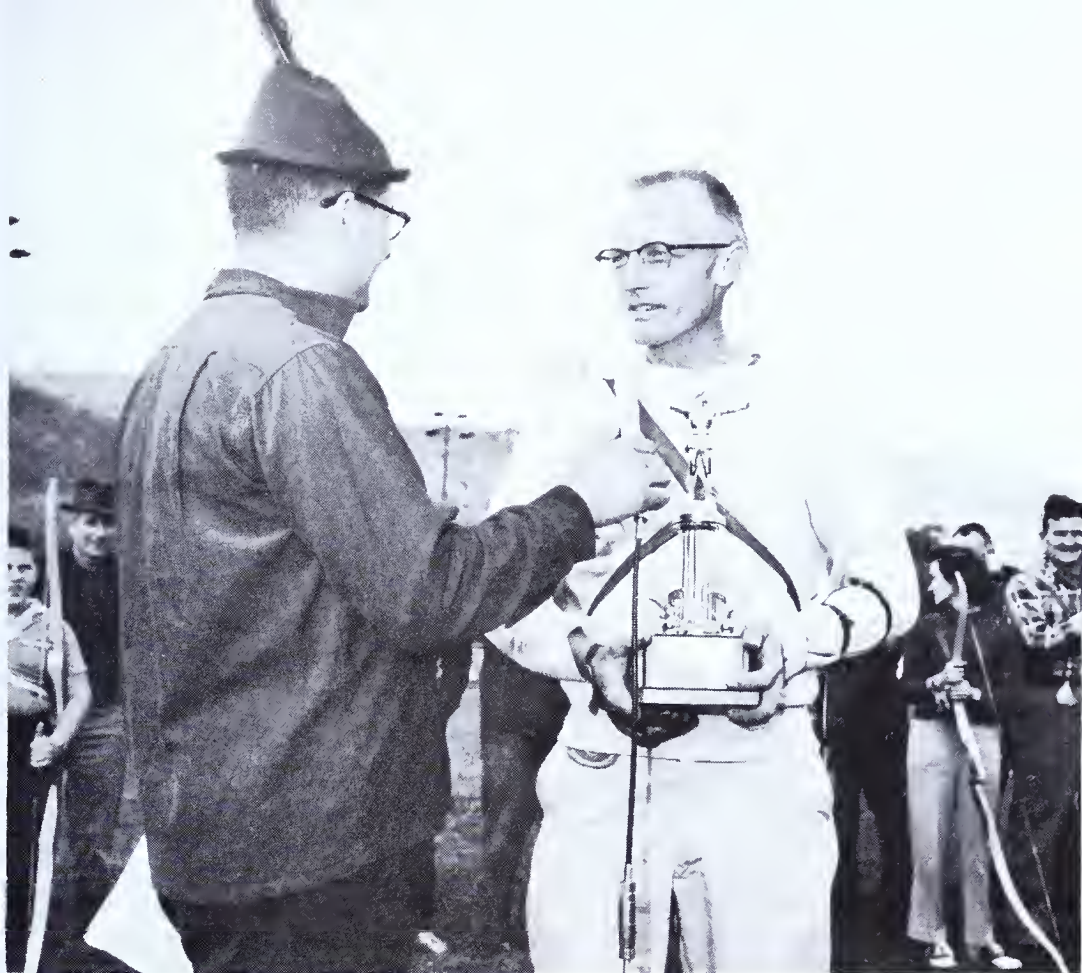
urge are the ones who fret if they don't keep the "score" even (it helps them enjoy themselves if you'll lay a little bet) or are miserable if they don't "get the limit." Limits are for people who wouldn't know when to stop. Too often they only spur them on to fill it. Having left my "blood lust" somewhere in a primeval cave together with my club and bearskin, I have no desire, nor am I hungry enough, to kill off each season's crop of game to mere "seed" for next year. I have no way of knowing the predators will understand and lay off the few birds remaining. I also enjoy shooting a few large adult birds, not just the yearlings you usually find in heavily-gunned territory. Too, I want birds left over to work my dogs on after the shooting season.

Generous limits are not an estimate of a sporting kill under *every* condition. Two grouse a day are, to my mind, an intelligent limit. But I wouldn't have much self-respect if I shot those two in a single covert with a low bird population. As ratio of gunners-to-game increases, the way to measure sport is not by the yardstick of the old market hunter but by intensity of the thrill. The center of this response lies not in the belly but in the brain. Some things you have to feel, like Louis Armstrong's definition of *swing*: "If you gotta ask, you ain't never gwine to know."

If somewhere along the way I have touched a tender spot, don't put me down as a sorehead because we don't agree. Check your behavior in the field and see if you're the kind of person you yourself would like to share the last day of the season with. Would you make it that much more pleasant or would you find this guy—this *YOU* who up to now seemed perfectly justified in looking out for his interests first—a little like a brier in a wool sock, more irritating as the day wore on?

There are, you know, shooting *companions*, not *competitors*. I know some swell ones.





PENNSYLVANIA STATE CHAMPION Norman (Bud) Myers, of Coudersport, accepts the winner's trophy in the instinctive shooting division at the Robin Hood Festival from Frank Kuntz, St. Marys.

# A Town Turned Out For Archery

By Bill Walsh

**R**OBIN HOOD wasn't there, of course—but his disciples were on hand, and they got a royal welcome as a town turned out for archery. We're talking about the Robin Hood Festival held last fall in McKean County's attractive village of Smethport where archers gathered for two days of competition, good times, and the chance to take home one or more of the many trophies (valued at over \$1,000) offered for the event.

Sponsored by the Seneca Highlands Association in cooperation with local archery clubs, the Robin Hood Festival drew a good field, posted some good scores, gave away some fine

trophies — but accomplished something, perhaps, just a little more important than any or all of the foregoing. It proved how Americans, enjoying good clean sport in the out-of-doors, can muster up that old-fashioned spirit of having fun together that seemed on the way out as TV was on the way in.

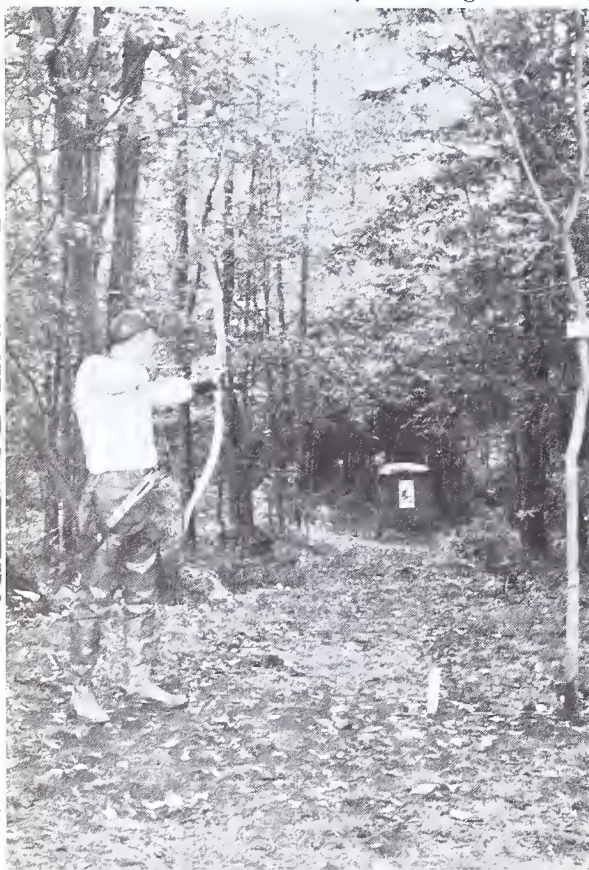
To show how folks can "get into the act," even some of the town's tradespeople wore Robin Hood hats (even though they never pulled a bow) as a way of extending a welcome to the visiting archers who came from all over Pennsylvania and some neighboring states as well.





**PENNSYLVANIA JUNIOR CHAMPION** Larry Mann, of Brockway, demonstrates the form that won state titles in 1957 and '58 as well as the national junior championship title in 1958.

**FIELD COURSE TARGET** drew a shot from Al Duca, Erie archer, at the Robin Hood Festival last fall. The live game target was included in Sunday morning's shooting.



A week-end event, shooting began on a Saturday morning at 10:30 o'clock with a round of 28 field targets. On Saturday afternoon the archers shot a round of 28 hunter's targets. Yes, this is work and they were now ready for play.

So a special outdoor movie program and an "Archers' Ball," was scheduled in the Smethport High School.

On Sunday morning, the competitors shot a round of 28 live game targets to wind up the competition—and in the early afternoon began gathering (together with a lot of the townsfolk) in the Smethport Stadium for an archery display and the awarding of the prizes.

Crack shots like Pennsylvania's own Bud Myers, of Coudersport; Jim Palmer, of Danville, N.Y., and Hunter Nicholas, of Weirton, W. Va., put on a dazzling display of marksmanship that had the crowd sitting on the edge of the benches.

And many an "older hand" sighed enviously at the top flight shooting of the boys in the junior division—youngsters like Larry Mann, junior champion of Pennsylvania in 1957 and '58 as well as national junior champ for 1958; John Gabriel, Jr., of Olean, national junior champ in 1957 and New York state junior champ in 1958, and Robert Ross, of New Cumberland, current junior champ of West Virginia.

Pennsylvania's Bud Myers listened carefully while Frank Kuntz, St. Marys archer who served as master of ceremonies, explained to the crowd that the purpose of the 125-yard wand shoot was not to hit the wand but to see who could come closest to it. So Norm hit the 6" wide target dead center at that extreme range—proving that no deer is safe in front of the right bow and arrow combination and the right eye behind the draw.





# Pheasant Preserve And Shotgun School

By Charley Dickey

**C**LAY pigeons and ringneck pheasants flying through the air on the same farm may seem a little unusual. But that's exactly what happens at the farm of James L. Cox near Honey Brook.

Cox, who is in the sporting goods business at Bryn Mawr, decided that many sportsmen in the Philadelphia area would do more hunting and shooting if they had places to go. He understood well the problem of the shotgunner looking for a place to enjoy his favorite sport. But what is important is that he did something about it.

In the historic Brandywine Valley of Chester County, Cox operates a unique combination of pheasant preserve and shotgun school. Foremost in mind was creating a place where kids could shoot. Cox says, "We offer

an opportunity for youngsters to learn safe and satisfactory handling of the shotgun and acquire a solid background for a life-long sport."

The school furnishes all of the equipment such as shotguns in three gauges, clay pigeons, trap ranges and, most important of all, careful and safe personal supervision. Long range plans call for adding a skeet field and "walk-through-the-woods" shooting with concealed traps.

Cox also found that many of the elders could use some refresher training in shotgun handling. While the big ringneck pheasant may seem like an easy target, shooting preserve operators complain because the *average* hunter can't hit them cleanly. Too many hunters don't do any shooting between seasons and when a ringneck bursts out in front of

them they don't have an eye for the target.

Although some of the adults are reluctant to take clay pigeon practice at first, several misses in the field brings them gladly back to the traps. Cox says, "It isn't unusual for hunters to get their bag of pheasants and still shoot a round of trap after they leave the field."

The training for any new shooter starts with the safe method of handling a shotgun under all situations, familiarization with all parts of the firearms, and then theory and practice of leading a moving target. Although the kids are anxious to go after the pheasants, they have to give a good performance with the clay pigeons before they are allowed to hunt.

Naturally safety is stressed at all times. Cox says, "All loading for students is done by the instructor at first, one shell at a time. As the students gain experience, we allow

them more and more responsibility in gun handling."

Pheasants are stocked daily or weekly as they are needed on the 220 acres of rolling land. Because pen-raised birds are used, shooting preserves are allowed a five-months season starting October 1. Like most preserve operators, Cox has easy areas of open fields for the beginners; for the experienced hunter he has tough woodland and thicket shooting.

Cox has encouraged families to use the farm. And some of the women have rapidly become expert shots. Many of the women quickly proved that they could bring home the "bacon" as well as pop.

The farm is mainly a place of convenience to hunters and shooters. It's handy to the large population of eastern Pennsylvania and offers tower shooting of pheasants in addition to field shooting. Ringnecks released from the tower fly high over the

CLUB ROOM at the Cox preserve near Honey Brook is filled with "gun talk." These visitors relax while waiting for a round of clay bird shooting, a live hunt for ringnecks, or a combination of both.







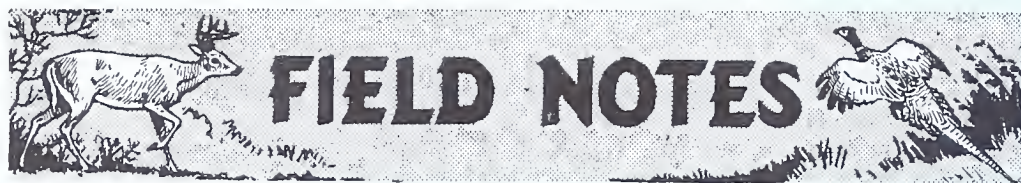
**TOWER RELEASE** sends pheasants over the shooting stands, at long ranges. It's a different, and difficult, type of shooting because the birds are flying at the hunters instead of away from them. This kind of shooting quickly teaches the value of proper lead.

shooting stands and offer some of the sportiest of all wing shooting. And something different. The birds fly *towards* the hunters instead of away from them. This throws even the old-time pheasant shooter off his mark.

Good dog work in the field and during the tower shoot helps to save crippled birds. And, of course, many of the hunters enjoy the dog work almost as much as actually pulling the trigger.

The pheasant shooting is offered every day except Sunday between October 1 and March 1. The shotgun school is open every Saturday the year around.

Other preserves around the nation have seen the value of offering clay pigeon shooting to their hunters. Some use only hand traps or practice traps. But it all adds up to the same thing. Hunters get much-needed practice before they hit the fields. And they can practice the year around on the clay pigeons.



### Maternity Ward?

LANCASTER COUNTY—Deputy Martin Stoner told me of a very interesting occurrence that he witnessed. Deputy Stoner runs a welding shop in the Boro of Quarryville. Right across the street from his shop is a large metal building that is used for the storage of steel and other supplies. From time to time Deputy Stoner noticed a very tame rabbit fooling around this building. On the morning in particular the doors of the building were not opened at the usual time and he saw the rabbit just sitting there as if waiting for them to open the doors. Finally the fellow showed up to open the doors. The rabbit still kept sitting until he opened the door whereupon the rabbit hopped into the building and went directly behind some boards that were propped in a corner. Deputy Stoner investigated and found that the rabbit had a nest of young behind the boards. At the time of this writing the whole family is doing nicely.—District Game Protector J. P. Eicholtz, Strasburg.



### Turkey Trot

CENTRE COUNTY—One of the "old timers" in the hunting and fishing game in this area, Charles 'Tater' Swank of Lewisburg, related to me a recent unusual wildlife incident he had the opportunity and pleasure to witness. On June 10, 1959, in company with Dr. Amos Smith of Lewisburg and his son Skip, he journeyed to the west end of Union County for some fishing in White Deer Creek. "Tater" had separated from the Smiths to fish one of his favorite stretches of stream. It was at this time he came upon two wild turkey toms fighting. Being within 30 feet of the conflict, he knelt down and watched the activity for about 15 minutes. He said it was quite a tussle. They would pick at each others neck, bite fast and both would be pulled to the ground. The birds sported beards 4 to 6 inches in length and he estimated their weight at approximately 14 to 15 pounds. Mr. Swank is an ardent and quite successful hunter and fisherman but in all his years he had never previously witnessed a similar exhibition.—District Game Protector John S. Shuler, Lewisburg.

### Live Band Return

FULTON COUNTY—A pathetic and unusual thing happened south of Big Cove Tannery. A farmer mowing hay, heard a commotion and saw a turkey hen fly away. He investigated and found a nest with eight eggs. In the nest lay a leg bearing a Game Commission band. This is probably the first band returned from a turkey that may still be alive.—District Game Protector Carl E. Jarret, McConnellsburg.



WHO NEEDS  
WATER?



### Beaver Garden

INDIANA COUNTY—On June 13, 1959, Deputy Game Protector Herbert L. Gernandt of Rochester Mills received a call from a Mr. Painter of R. D., Rossiter, Pa. Mr. Painter explained that he had a beaver living in his garden and that morning Mr. Beaver had cleaned out a row and a half of his garden. He had thrown an orange crate over him and wanted the Deputy to come get him as he was afraid he might get away. Deputy Gernandt proceeded to the Painter's residence with a little doubt about the beaver since the nearest water was approximately two miles away. Arriving at the residence of Mr. Painter, Deputy Gernandt observed several men, armed with shovels, surrounding a beaver, approximately forty-five pounds in weight. The beaver was soon caught again and transported to one of the larger streams in the county where no gardens will be near. The Deputy's investigation revealed that the beaver had been living in a large groundhog hole, only a few feet from the garden, and several miles from any amount of water.—District Game Protector John A. Badger, Indiana.

### Masked Bandit

LUZERNE COUNTY—During the third week in June the manager of a

department store in the heart of downtown Wilkes-Barre called the North East Division Office at Forty Fort stating that a raccoon was in the store and would someone please remove it. Upon investigation I found the animal nervously perched on the edge of the sixth floor roof. While deciding whether and how to use the 22 cal. rifle I had brought along, the coon frightened by the number of people gathered at adjoining office and store windows took off ape-like over the side of the building along window ledges and fire escapes. With relief I informed the manager that since the coon was now free to go, it would probably head for more natural surroundings after dark. One week later another call came to the Division Office that a reccocon was in the ladies room of an office building adjoining the department store. Accompanied by Game Protector Jack Altmiller we found what appeared to be the same full grown coon clinging to various pipes along the ceiling of the room. After a fierce 15 minute battle we finally emerged with the coon in a burlap sack. The coon was released near State Game Lands 91 content I hope to leave city life to his more domestic brethren.—District Game Protector Edward F. Divers, Wilkes-Barre.





### Never Pick Up Hitch-Hikers

**NORTHAMPTON COUNTY**—One evening this June a person with a European Brown Bear spent some time in one of our local establishments indulging in a few beers. When they left, both in the same automobile, the driver failed to negotiate a curve and rolled over three times, much to the dislike of Mr. Bear, who immediately left the scene of the accident and took off down the road on foot. A couple of boys saw the bear at 1:30 A. M. standing in the road waving its forearms, but they did not stop. When they arrived at the scene of the accident, the driver asked if they had seen a bear and they took him to it. This time the driver tied the bear to a tree in a yard. At 5:30 A. M. the owner of the property who did not know of the accident looked out of the window and grabbed the telephone to call the local Police Department exclaiming, "When I went to bed last night everything was in order. Now I have a big bear tied to a tree in my front yard!" Apparently Mr. Bear lost all faith in humanity or automobiles because he refused to enter either an auto or truck to return home. Two days later, through the use of a tranquilizer, Mr. Bear was returned to his home on a secluded farm near Hellertown, there to remain.—District Game Protector Harold Wiggins, Nazareth.

### Howdy Haven

**CENTRE COUNTY**—I received a call from Mrs. Earl May, a resident of Benner Township, Centre County, on June 29, concerning a coon that had walked into their yard and up to the house. It was given pieces of apple and some cookies, but because it seemed a little on the snappy side, and for the best interest of the children, it was returned to the woods near their home. Again on the 30th another call was received for the same reason. However, the May family and their neighbors claim that this was a different coon. I picked this young coon up to remove it from the area and found that it had been eating a diet of apples and cookies. (This coon was reported to be considerably tamer than the first one and slightly smaller.) We can't make up our minds if the first fellow returned to spread the news of free handouts, or if this may be part of their training for the "HOWDY" posters.—District Game Protector Charles M. Laird, Pleasant Gap.

### Tar Baby

**LEHIGH COUNTY**—A woman noticed a rabbit run through a freshly oiled street. Soon the rabbit was covered with tar, and helpless. She called me to ask how it could be removed without harming the rabbit's skin. I could not give her any advice, but, later she called to say that the rabbit was in good condition—she had used over a pound of lard and was able to remove all of the tar.

Mrs. Biever, R#1, Alburtis, called to tell me that, in mowing, they had destroyed a pheasant nest, saving four of the eggs. These she put into her gas oven, with pilot light burning, as she had noticed from the broken eggs that they were about ready to hatch. Four baby pheasant chicks, hatched the next day!—District Game Protector William A. Moyer, Allentown.



### Just Fishing

WAYNE COUNTY—On June 21, I assisted Fish Warden Bartley on stream patrol in Pike County, and just as dawn was breaking I happened upon a fairly large bear. Sir Bruin was laying upon a large boulder, trying to forage for his breakfast in a clear mountain pool. He was so engrossed that I was able to creep within 50 yards of him. He finally did snare a creek chub which he immediately devoured, licked his chops and then strolled leisurely into the forest, never aware of my presence. Fish Warden Bartley also saw a female bear and her 40 pound cub that same morning.—District Game Protector Fredrick G. Weigelt, Honesdale.

### Flash Red

LAWRENCE COUNTY—Near the door of my headquarters at State Game Lands No. 216, I was attracted by the antics of a large robin. The frightened bird flew to within a few feet of me about five times, then it would fly back to a spot near a large maple tree scolding all the while. Since I was not able to see a predator of any kind I stood watching. Mrs. Robin again flew to me and back almost to the tree as though she was going to perch there, but quickly swerved and alighted on the ground. During this maneuver another robin flew to within about two feet of her enemy at which time I noticed only the head of a four foot black snake. I removed the snake from the tree and the noisy robin went back to her nest to look over her two young birds.—District Game Protector Calvin A. Hooper, Jr., New Castle.

### Roadside Menagerie

MERCER COUNTY—Mercer County has had Mrs. Bear and her child as a visitor from the mountains again this year. During the early

part of June, Mrs. Bruin and her cub were seen in mid-afternoon playing in a yard beside a house along Route 62 near Stoneboro. Traffic on 62 enjoyed the free show of the wild roadside menagerie before the bruins went back to the woods. Two weeks later another bear was sighted crossing a highway just north of Greenville, which possibly could have been one of the same sighted before.—District Game Protector Arden D. Fichtner, Greenville.

### Woodchuck War

BEDFORD COUNTY—A local farmer decided to put an end to all the grief a family of groundhogs was causing him in the middle of one of his fields. Armed with pick, shovel and 22 rifle he began his assault early one afternoon. Evening came and no success. When he returned to carry on the next morning he found that the groundhogs had chewed the stock off his 22 rifle.—District Game Protector John J. Troutman, Everett.

### Plowed Under and Up

BUCKS COUNTY—In 1953 I plowed my billfold in the ground while plowing food plots on Game Lands No. 56 in Bucks County.

This month a member of the Food and Cover Corps was plowing the same food plot and found the billfold. The Game Protector's badge and one license card were in very good condition.—P-R Area Leader S. Earl Carpenter, Reading.



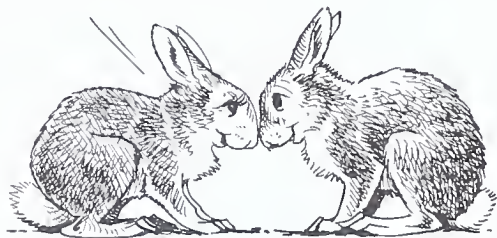
### Any Snakes In The Storm?

**JUNIATA COUNTY**—We have all heard these old-wives tales about the thunder awakening the snakes and making them stir around. After the cloudburst we had in Juniata County on the night of June 25 I can readily understand how those stories originate. It was about midnight when I was returning from the old turkey farm, State Game Lands No. 215 near Honey Grove. I was going up the side of a rocky ridge in my auto and came upon two large copperhead snakes in the road. I killed both of these and discovered why they were there; the heat waves coming from the warm tar in the road probably felt pretty good to these cold-blooded reptiles.—District Game Protector Robert P. Shaffer, Mifflintown.

### See, Hear, Do No Evil

**CLARION COUNTY**—While on patrol in Clarion County I came across three rabbits sitting motionless nose-to-nose in the middle of a dirt road. So as not to hit the rabbits, I came to a complete stop. Still the rabbits would not move. I stepped from the car just in time to see a Coopers Hawk make a pass from above that would put a Jet to shame. The hawk did not connect so he climbed for more altitude. The rabbits still sat frozen. The end result was that I almost had to kick them off of the road.—District Game Protector Leo J. Badger, Knox.

*I'LL BET YOU TELL  
THAT TO  
ALL THE GIRLS*



### Even Unto Death

**MONTGOMERY COUNTY**—During the month of June, 1959, Deputy Enos Rich of Chestnut Hill, Pa. received a call from the Police that a deer was hit and killed by an Automobile in Whitemarsh Township. Between the time the deer was hit and the Police could get in touch with Deputy Rich a period of about three hours had elapsed. During this period of time this deer, a doe, had lain along the highway and had become quite bloated with gas. As the deputy approached the deer he became quite amazed and at the same time quite sorry to see that a fawn was standing beside its dead mother bucking and trying to get milk from her. The fawn would run off into the woods when anyone approached but as soon as the Police or the Deputy retreated the fawn would come back out on the road and try to get more milk. If more motorists could have seen this episode, I feel sure that they would drive a little more carefully when they see game on the road.—District Game Protector William E. Shaver, Mainland.

### Rabbit Bonanza

**ARMSTRONG COUNTY**—State Game Lands No. 137 in Armstrong County has been stripped, back filled, planted with shrubs and seeded to grass. We purposely did not stock any rabbits on this area because we wanted to see what mother nature would do with the rabbit population.

On June 29, 1959 (three years after the plantings), Food and Cover Corps Foreman Lou Eddy mowed about ten acres of the grass area. He counted twenty-three different rabbits of three different age groups. This should indicate that if we assist mother nature with a good food and cover program, she will take care of the rabbit stocking program for us.—District Game Protector Charles Hertz, Rural Valley.



# What Is Pellet-Shock?

By John Alden Knight



**I**T was a sparkling November day and my friend and I were hunting pheasants on a nearby farm. The property had been shot over but little that fall and our two cocker spaniels kept themselves busy flushing birds from the heavy cover—hens mostly, with now and then a rooster to give us some shooting. As the day wore on, I noticed that my companion was shooting unusually well. A cock pheasant would flush, his gun would crack, and the bird would fold in mid-air, immobilized as though it had been struck by an unseen hammer. There were no crippled or running birds to occupy the time of the little dogs. Each rooster they brought in to him was totally and completely dead.

That evening my friend 'phoned me. "Jack," he said, "did you notice anything unusual about those birds I shot today?"

"Yes," I replied, "all of them seemed to be well centered and they were stone-dead when they hit the ground. You were shooting well."

"Let me tell you something," he said. "I was sleepy and in a hurry

when you came for me this morning. I reached into my gun cabinet, grabbed two boxes of sixes, and shoved them into my coat. Trouble was, in my hurry I read the numbers upside-down. I shot those birds with low-base nines—woodcock shells."

Meanwhile, I, who had been using high-speed sixes, spent the day running down crippled birds which came to earth hard-hit but still alive and reasonably active. The contrast was too marked to be ignored. While I did not know it at the time, that was my introduction to the effects of multiple pellet-shock and it set me to thinking. After all, high-speed sixes were at that time the accepted pheasant load—for that matter, they still are by the rank and file of pheasant hunters.

Fourteen years ago, in the fall of 1940, I stopped in to pick up some woodcock shells at the local sporting good store. The owner, since gone to the happy hunting grounds, showed me some special shells which he had ordered from one of the ammunition companies—a box of twelve gauge high-base tens. He insisted that they were the best grouse shells he had

ever used. He split his last box with me and I took the shells woodcock shooting. Believe me, those woodcock came down dead, just as the ring-neck roosters had about two years earlier.

My old friend, the late Colonel Harold P. Sheldon, author of so many charming books, the background of which is the outdoors, gave me the first concrete idea that I had been able to find concerning multiple pellet-shock. We had been hunting woodcock in his favorite covers in southern Vermont and had stopped for a breather and a cigarette. We found a convenient log, lit up our smokes and, as usual, Hal was talking.

"Right over there in that clearing—see that old stump? Well, I was sitting on it one day, resting a bit and figuring on where I could find some grouse. The next thing I knew, I was lying on the ground, about three or four feet away from the stump. My right hand was bleeding and the side of my face and my neck stung and smarted to beat the band. I put my hand up to my face and found that it, too, was bleeding.

"What happened was this—a young man had shot at a grouse which flushed from the edge of the clearing. He was sixty or seventy yards from me at the time and he had no idea that anybody was near until he saw me getting up off the ground. He was using a regular  $7\frac{1}{2}$  trap load but he had a full-choke gun that threw a tight pattern. The doctor picked seventy-two pellets out of my protesting carcass.

"The thing that impressed me at the time was the impact with which those seventy-two tiny pellets struck me. It was just as though I had been smacked off that stump by a giant hand—"swatted" is the word, swatted *hard*.

"It set me to thinking, so I made inquiry. At last I ran across somebody—I forget who it was—who gave

me the underlying theory of pellet-shock. Briefly, it is this—pellet-shock increases in geometric progression according to the number of effective pellets. Sounds involved, but it isn't. Suppose, for example, that the shocking power of one pellet is "X." Not the hitting power in foot-pounds—the *shocking* power. If you remember your arithmetic, which I doubt, you know that geometric progression increases as the SQUARE of the number. Thus, if five pellets strike the bird or animal at which you shoot, the shocking power, instead of being five times "X," is the square of five or *twenty-five* times the shocking power of one pellet.

"When that charge of  $7\frac{1}{2}$  shot hit me—you recall that the doctor found seventy-two effective pellets—the combined wallop was the square of seventy-two or five thousand, one hundred and eighty-four times the shocking impact of one pellet. Small wonder that I was knocked end-ways."

So there you have it—pellet-shock increases as the *square* of the number of effective pellets. All right—that's fine in theory but how are you going to prove it? That, I find, is a large order.

Knowing that the ammunition companies have ballistics experts whose job it is to investigate constantly the behavior of shot pellets and bullets while in motion, I wrote to two of the ammunition companies, asking for exact information. In each case I received a very courteous letter from the head of the research department. Each letter was couched in erudite scientific phraseology which, when boiled down, didn't really mean very much. Let me give you a sample. This is what the head of one research department said to me, in part:

"A great deal of scientific work has been done on the subject of shock in the general field of wound ballistics. Much of this work is still





**THIRTY YARD SHOT** with 3 drams equivalent of powder and one ounce of Number 8 shot crumpled this ringneck rooster in mid-air.

classified and cannot be released. However, in view of the vast amount of field experience available on the effectiveness of various shot sizes and shot weights at various distances with all kinds of game, little can probably be gained by applying this laboratory work to the question of shot shell effectiveness."

That last sentence, I suppose, is another way of saying that there are two schools of thought in the matter of shotgun loads—those who use small shot effectively and those who place their faith in high-speed sixes, fives and fours. East is East and West is West and never the twain shall meet. In any event, our scientific friends really did not provide a great deal of exact information. We, my son and I, decided to see what we could find out through actual field experiments.

Accordingly, we drove down to a game farm which is about thirty miles from our house. The manager

caught half a dozen pheasants in the holding pen, packed them into crates, and drove to a nearby field. Once there, we paced off thirty yards—a good average range for flushing ringneck—and marked the distance with stakes. Then the manager took a bird from one of the crates, placed its head under its wing, and "rocked" it into temporary slumber. This done, the bird was placed at one end of the thirty-yard range.

We had with us our big press camera, so one would do the shooting while the other took snapshots of the action. When everybody, including my setter, Spot, was in position, the gunner would nudge the bird with his toe and then pick it up with the shot charge as it passed the thirty-yard mark, give or take a few yards.

Now those birds set us back an average of four bucks apiece—five for roosters and three for hens. For obvious reasons, we confined our shooting to six birds. Three were shot with

low-base eights and three with high-speed sixes. As luck would have it, we were shooting well and all six of the birds were well-centered in the shot pattern. The three birds that were shot with eights stayed where they fell. Conversely, two of the three that were shot with sixes, although hard-hit, kept on going and had to be finished off with the second barrel. The third, a big rooster, came down with a broken wing and gave Spot quite a race before he could be caught and brought in.

As said earlier, this theory of multiple pellet-shock is a difficult one to prove, largely because of the fact that nobody seems to know exactly what pellet-shock is. As you know, the energy of a moving body is calculated in foot-pounds or fractions thereof. I'm not sure that the theory would stand up under the clear light of mathematics—probably wouldn't. Is it, then, the multiple shocking reaction on the nervous system of the target? I could not answer that one either, but I remembered that the medical profession has learned a great

deal about shock during recent years. Why not talk to a man who knows about shock and who has dealt with it first-hand?

Accordingly, I took this unfinished manuscript with me while I called on a friend of mine who is a good surgeon. He read the story with obvious interest.

"It's an interesting slant on shock," he said. "It may be that your theory fits in with the information that we now have on the subject."

"What," I asked him, "are the mechanics of shock? Exactly what happens to a bird, animal or human being which has been subjected to shock? What causes it to be fatal?"

"I'm not sure that I can tell you *exactly*," he replied. "After all, several lengthy books have been written just on shock alone. Roughly, what happens is this: The animal, bird, what have you, is subjected to shock. The immediate result is the dilation of the capillary bed. You know what capillaries are—the tiny terminal vessels that lie just beneath the skin of the entire body. They are countless

**HARD-HIT BIRD** kept going and had to be finished off with second barrel. The first hit was scored at 30 yards using  $3\frac{3}{4}$  drams equivalent of powder and  $1\frac{1}{4}$  oz. of Number 6 shot.





in number and they form an integral part of the circulatory system. They are the only connection between the arteries and the veins.

"All right, shock is induced by some outside agent—accident, operation or, as in this case, gunfire. The immediate result is the dilation of the capillaries to a greater or less degree, according to the amount of shock involved. Enough dilation can be, and often is, fatal. The capillaries expand, the circulatory system is thrown out of kilter and the whole mechanism stops, just as you would stop a clock. That, of course, is an extremely unscientific and unmedical explanation but it may serve to give you the general idea."

"Now, as to your theory of shock increasing in geometric progression according to the number of effective pellets—that surely should be given closer scrutiny. How, for example, will you go about measuring a shock thus administered? I can't help you with that one."

Looking at shock in this fashion, the multiple-pellet theory begins to make some sense. Small shot, obviously, do not have the penetrating power of larger shot. Yet enough of them do have the shocking power to kill a bird without so much as touching a vital organ.

Some wise man once said that there is nothing new under the sun, or words to that effect. I suppose that's another way of saying that it is a difficult thing to come up with an idea which has not been thought up by somebody else. Way back yonder

in 1922, my old friend, Clarence Marsh of Orlando, Florida, told me that he was using high-speed seven-and-a-half shot for shooting mallards and black ducks over decoys. This means that most of his shooting was at ranges of thirty-five or forty yards. He said he killed more ducks and had fewer cripples with small shot than he had with sixes and fives.

Now I find that a local group of gunners has gone over to low-base eights for shooting mallards, black ducks, pintails, etc., over decoys down on the eastern shore of North Carolina. The one of this group with whom I talked said that he used eights in "brush loads" which, as you know, give a wider pattern than the orthodox load. He said he was killing his ducks at ranges up to fifty yards, the birds coming down completely dead, with very few cripples.

It seems unlikely that anything of a definite, two-plus-two-equals-four nature ever will be proven conclusively in the matter of pellet-shock. Considered in the light of foot-poundage alone, it is doubtful that the theory would stand up. Conversely, how do you go about measuring the result of pellet-shock on the nervous system of a game bird or animal? Where does foot-poundage leave off and nervous shock become effective? Your answers to these questions are certainly as good and probably better than mine. All I can do here is to tell you what we have been able to learn under actual shooting conditions where, as I say, the theory does seem to stand the test.



# Jefferson Borough's Hunting Experience

By Perry Walper

Sports Afield Editor, Pittsburgh Sun-Telegraph

"Be it enacted . . ." And thus another municipality is closed to all hunting within its limits. Such an ordinance may not specify hunting, but the prohibition of use of firearms or any device discharging a missile effectively eliminates hunting.

This is the easy and sure way to be rid of the careless hunter. It satisfies most of the residents for personal and property protection. It also deprives the responsible hunter of the recreation which he might otherwise enjoy.

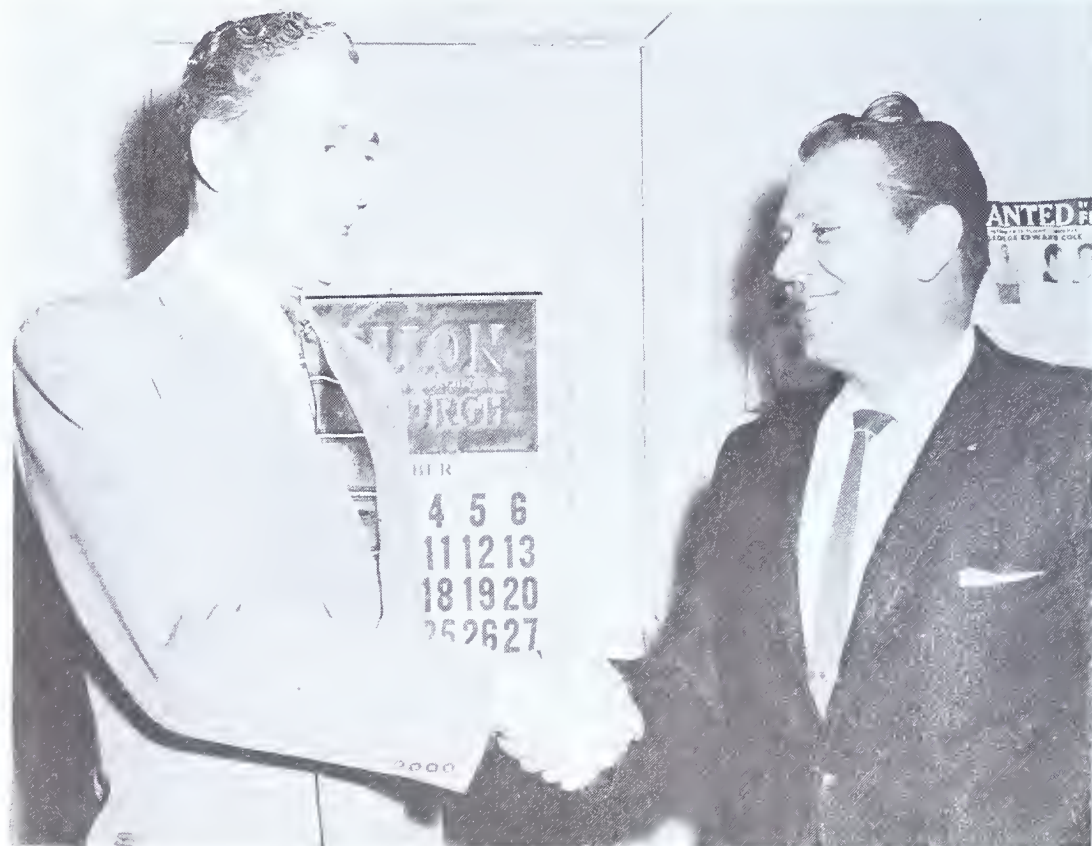
The list of municipalities closed to hunting increases. The careless two

per cent of so-called sportsmen who shoot first and look later move into new areas.

Soon their carelessness causes an incident which closes that area to hunting. The sportsman who winks at the violator, rather than become involved, is largely to blame for the loss of his own sport.

The story of Jefferson Borough is different; in fact, it is unique. This is a borough, mind you, not a township. It has an area of 24 square miles and a population just under 9,000.

About one-third of the land is



JEFFERSON BOROUGH POLICE CHIEF William Pust, right, is congratulated by Deputy Game Protector Paul Devlin for having a successful and accident-free small game season in 1958.



wooded. There is abundant small game, but until the past small game season hunting had been prohibited by ordinance.

The ordinance remains on the record and prohibits the discharge of any firearm within the borough limits with the exception of controlled shooting on the ranges of sportsmen's clubs.

Burgess Paul Graham, Jefferson Council and Chief of Police William Pust pondered the problem a long time before the new ordinance was adopted. In public hearing, it was fully discussed and finally passed. In effect, the new ordinance opened the Borough of Jefferson to small game hunting during the month of November.

There was no history of any other borough ever having opened its lands to hunting once they had been closed. This would be an experiment. If the experiment failed, the ordinance would be withdrawn and all hunting once again prohibited.

It was with mixed feelings of hope and anxiety that Chief Pust and his men moved through the small game season.

For added safety, shooting limits were set at 500 feet from homes and 1,000 feet from schools. This is in excess of the requirements of the State Game Law limits, but it was felt by council that the greater safety margin was necessary in this case.

When the small game season had ended, the experiment was fully successful. Good conduct and safety measures were exercised by all sportsmen hunting in the borough. No arrests were made and a total of only

three minor complaints were received. There were no shooting accidents.

Chief Pust commented: "Many of our residents hunted within the borough. I am pleased to say that sportsmen were well behaved and fully safety conscious. I saw hunters actually break their guns when crossing or walking along a road. Years ago, this was rarely seen."

He goes on to explain that gun safety taught by sportsmen's clubs and in the Game Commission's Hunter Safety Program is making the hunter safety conscious.

Council and the residents of Jefferson Borough were well pleased and it is the opinion of the chief that the new ordinance will stand to again permit small game hunting in 1959.

He says further that the ordinance will remain as long as conditions permit. A serious incident or violation in any future season will leave no choice but to prohibit hunting. Then too, it is recognized that as the borough develops, future hunting will become impractical for reasons of general safety.

Both borough officials and representatives of the Game Commission point out that the record of this past season was not due to either a shortage of hunters or small game. The kill was good, and the number of hunters was great, especially on Saturdays.

It is a pleasure to relate this successful experiment in returning hunting to the people. Certainly the recreational values are great enough to cause other municipalities to reconsider their "no hunting" ordinances.





## 1959 Seasons and Bag Limits for Rails and Gallinules, Doves and Woodcock

The seasons and bag limits governing the taking of certain migratory game birds are established by the U. S. Fish and Wildlife Service. The following federal regulations will be effective for the 1959 seasons on Gallinules, Rails, Mourning Doves and Woodcock in Pennsylvania.

The open season for taking gallinules and rails will be September 1 to November 9 inclusive. The daily bag limit for sora, other rails, and gallinules is 15; the maximum possession limit after the first day is 30. In previous years the daily and possession limit on sora was 25; in 1959 the daily and possession limits on sora will be the same as those for other rails and gallinules.

The 1959 open season on mourning doves will be similar to that of 1958. Hunting for doves will begin September 1 and end on November 4. Hunting hours will be 12:00 o'clock Noon E.S.T. to sunset. The daily bag limit is 10 and the maximum possession limit after the first day is 20.

Woodcock may be hunted from October 15 to November 23 inclusive. The daily bag is 4 and the possession limit after the first day is 8.

The shooting hours for gallinules, rails and woodcock are one-half hour before sunrise to sunset, except on the opening day of the waterfowl season (date to be announced later) and on October 31, 1959, when the opening hour for all hunting is 8:00 A.M. o'clock E.S.T.

Sunday hunting for game is prohibited in Pennsylvania.

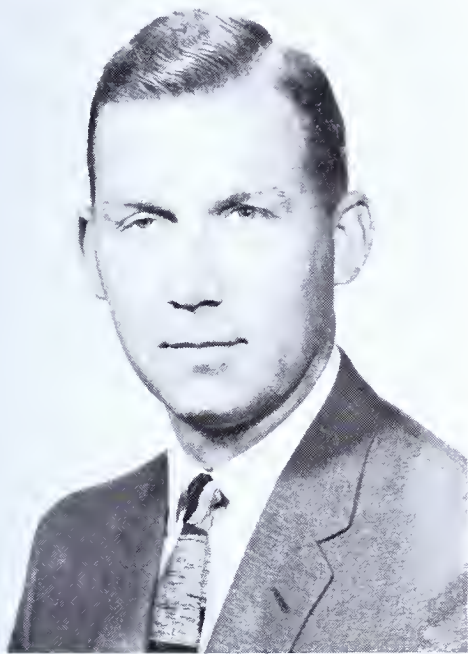
In summary these seasons, etc., are:

<i>Species</i>	<i>Open Season</i>	<i>Daily Bag</i>	<i>Possession Limit</i>
Gallinules .....	Sept. 1-Nov. 9	15	30
Rails .....	Sept. 1-Nov. 9	15	30
Sora .....	Sept. 1-Nov. 9	15	30
Doves .....	Sept. 1-Nov. 4	10	20
Woodcock .....	Oct. 15-Nov. 23	4	8

Shooting hours (note exceptions above): Gallinules, Rails, Woodcock—one-half hour before sunrise to sunset. Doves—12:00 o'clock Noon E.S.T. to sunset.

The open season, shooting hours and other regulations for hunting waterfowl will be announced after August 15.





### **Game Commission Announces Appointment of Bowers As Deputy Executive Director**

Glenn L. Bowers has been appointed Deputy Executive Director of the Pennsylvania Game Commission. For the past two years he has been Chief of the Division of Research.

The new Deputy Executive Director is a native of York, Pa. and is presently residing near Dillsburg. His employment by the Commission, as a field biologist, began August 16, 1948. Mr. Bowers obtained his Bachelor of Science degree in zoology and entomology from Pennsylvania State University in 1946. He received his Master's degree in Wildlife Management from the same University in 1948.

From 1942 to 1945 Bowers was a captain in the U.S. Marine Corps, flying combat missions in the south Pacific. He is married and has a son and daughter. The new Deputy is an avid hunter, raising and training his own bird dogs. He holds memberships in the Wildlife Society, American Society of Mammalogists, American Ornithologist's Union and the Izaak Walton League of America.

### **Ponds For Waterfowl**

The Game Commission continues to construct shallow marsh ponds for ducks in a project that ties in nicely with the agency's duck rearing and liberation program. There is a particular need for the waterfowl areas because Pennsylvania is not blessed with many resting and feeding areas for transient waterfowl. Construction of the impoundments is largely financed through Pittman-Robertson funds. A representative of the U. S. Fish and Wildlife Service inspected several of the impoundments this spring. He expressed himself as well satisfied with the project in the Commonwealth.

Since 1954, when the Commission began providing this assistance for ducks, 19 of the dams have been completed, aggregating 187.3 water acres. Ten that will flood 169.4 acres are under construction and will be completed in 1959. The Commission has approved three other dams that will total 65.3 acres. Plans are completed but it may not be possible to build them this year. The completed impoundments are in northwest Pennsylvania, in localities that lend themselves readily to such construction. Most of them are in Elk and Crawford Counties, on either State Game Lands or the Allegheny National Forest. The Game Commission recently approved the purchase of sites suitable for small marsh impoundments in Bradford, Susquehanna and Wayne Counties. Possible locations elsewhere are being investigated, and options have been taken on several.

In many instances forest growths have been removed from around the man-made water areas, and plants acceptable to wild waterfowl have been grown there. Also, the embankments of the dams have been planted to small grains and legumes utilized by the fowl. In some of the impoundments natural aquatic growths relished by waterfowl are present; in the others the vegetation is planted.

## Commission Sets 50 Day Waterfowl Season For Pennsylvania; Reduced Season, Shooting Hours and Bag Limits Start Oct. 24

The Pennsylvania Game Commission at a special meeting in Harrisburg on August 20 established open seasons and bag limits for wild waterfowl in accordance with directives from the U. S. Fish & Wildlife Service. The federal agency ordered reduced seasons, bag limits and shooting hours following a six-week survey of waterfowl nesting results on principal breeding grounds in Canada and the United States.

On October 24, opening day of the waterfowl season, shooting will begin at 12 o'clock noon, **Eastern Standard Time**. The season for these birds will run 50 consecutive days and will end December 12. This is 10 days less than in 1958.

The bag limits are: 3 ducks per day, with a possession limit of 6 after the first day. On coots the limit is 3 per day and 6 in possession after the opening day. One wood duck may be bagged in one day, and the possession limit after the first day is one. There may be included in the bag or in possession only one canvasback or one redhead or one ruddy duck. **Emphasized is the regulation that so long as a person has one of these latter kinds of ducks in his possession anywhere he may not include one in a subsequent bag.** A hunter may take one hooded merganser daily or have one in possession as part of his total bag.

American and red-breasted mergansers are not included in the bag limits for other ducks. They have a separate bag limit of 5 a day or 10 in possession, either singly or in the aggregate.

The season for geese (except snow-geese) and brant will be October 24

to December 12, inclusive. The daily bag limit for geese will be 2 and the possession limit 4 after the first day. The daily and possession limit for brant is 6. There is no open season on snow geese or swans.

As in other recent years, the waterfowl season in the counties of Bucks, Philadelphia and Delaware and on the Delaware River bordering these counties was set to conform with the season in New Jersey. Hence, the season for ducks and coots in the counties of Bucks, Philadelphia and Delaware will be from November 14 to December 23, a total of 40 days, with a daily bag of 4 and a possession limit of 8.

The season for geese (except snow geese) in the counties of Bucks, Philadelphia and Delaware will open October 24 and extend to December 22, with a daily limit of 2 and a possession limit of 4. The same season will prevail for brant, but the daily and possession limit will be 6.

Pennsylvania shooting hours for all waterfowl in the coming seasons, after the first day, are **sunrise to sunset**, except for October 31 (first day of small game season) when the opening hour will be 8:00 A.M., Eastern Standard Time. On the first day of the waterfowl season, October 24, 1959, the opening hour is 12 o'clock noon, E.S.T. Hunters are reminded that the hours for hunting mourning doves are 12 o'clock noon, E.S.T., to sunset.

Waterfowl hunters should note: **This year, after the opening day, the daily shooting hours will be sunrise to sunset—NOT one-half hour before sunrise to sunset as in other recent seasons.**



**LEGAL SHOOTING DAYS AND HOURS—SUNDAYS EXCEPTED**  
*Unlawful to hunt for any wild bird or animal, including migratory game, on October 31, 1959 prior to 8:00 A.M., EST. or on October 24, prior to 12 o'clock Noon EST. (Except deer with bow and arrow).*

Sora; Rails;					
Gallinules	Sept. 1	Nov. 9	15	30	1/2 hr. before sunrise to sunset
Woodcock	Oct. 15	Nov. 23	4	8	1/2 hr. before sunrise to sunset
Wilson's or					
Jacksnipe	Oct. 24	Nov. 21	8	8	sunrise to sunset (except Oct. 24)
Doves	Sept. 1	Nov. 4	10	20	12:00 o'clock Noon to sunset

**NO FEDERAL STAMP REQUIRED TO HUNT SORA, RAILS, GALLINULES, WOODCOCK, JACKSNIFE AND DOVES; STAMP REQUIRED TO HUNT DUCKS, GEESE, COOTS, AND BRANT.**

Ducks	Oct. 24	Dec. 12	3	6	sunrise to sunset
(Daily bag limit may include 1 wood duck; possession limit 1.)					12:00 o'clock Noon to sunset
(Daily bag and possession limits may include 1 hooded merganser.)					8:00 A.M., EST. to sunset
(Daily bag limit and possession limit may not include more than 1 canvasback, or 1 redhead, or 1 ruddy duck.)					
Mergansers (American and Red-breasted)	Oct. 24	Dec. 12	5	10 (not	
to be counted in daily bag and possession limits on other ducks)					
Geese (except Snow)	Oct. 24	Dec. 12	2	4	
Coots	Oct. 24	Dec. 12	3	6	
Brant	Oct. 24	Dec. 12	6	6	

**MIGRATORY BIRD HUNTING METHODS**

**Permitted:** Bow and arrow, or shotgun not larger than 10-gauge, fired from shoulder (including hand-operated and semi-automatic repeating shotgun of not more than 3-shell capacity, which must be plugged to 3 shots so that plug cannot be removed without disassembling the gun); dog; blind; boat propelled by hand; floating device other than sinkbox; artificial waterfowl decoys. Injured or dead waterfowl may be picked up by means of a motorboat, sailboat or other craft. Shooting is permitted from a boat or other craft having a motor attached if such craft is fastened within or tied immediately alongside of any type of stationary hunting blind.

**Prohibited:** Use of electrical devices or recordings in taking migratory game birds; all rifles; live bird decoys; automobile; aircraft; sinkbox (battery); power boat, sailboat, or any device towed by power boat or sailboat. Waterfowl, coot, gallinules and doves may not be taken under any circumstances by the aid of salt, or shelled or shucked or unshucked corn, wheat, or other grains, or other feed or means of feeding similarly used to lure, attract, or entice such birds to, on, or over the area where hunters are attempting to take them. As used herein the terms "salt or shelled or shucked or unshucked corn, wheat, or other grains," or "other feed or

means of feeding similarly used," shall not be construed as including salt blocks, properly shocked grain, standing crops (including aquatics), flooded standing crops, flooded harvested crop lands, or, in connection with the hunting of waterfowl, coots and gallinules, grains found scattered solely as a result of normal agricultural practices, or, in connection with the hunting of doves, grains found scattered solely as a result of normal agricultural harvesting. Waterfowl may not be hunted by means, aid or use of cattle, horses or mules and no motor-driven land, water or air conveyance or sailboat may be used to concentrate, drive, rally or stir up waterfowl or coots.

**FEDERAL STAMP FOR MIGRATORY BIRD HUNTING**

It is unlawful for a person over the age of 16 years to take migratory waterfowl unless he carries on his person an unexpired Federal Migratory Bird-hunting Stamp, validated by his signature written in ink across its face. Not valid after June 30 following date of issue. **This stamp is not required to hunt Sora, Rails, Gallinules, Woodcock, Wilson's or Jacksnipe and Doves.**

**NO OPEN SEASON—SNOW GEESE AND SWANS.**

## New States Will Effect Allotment Of Federal Funds For Fish and Wildlife

With Alaska now the 49th state and Hawaii about to be admitted to the Union the federal funds for fish and wildlife restoration for the 48 states which have been receiving such aid naturally will be reduced.

Federal aid for fish and wildlife is administered by the U. S. Fish and Wildlife Service under two acts. The Pittman-Robertson Act collects an 11 percent excise tax on all sporting arms and ammunition sold in the United States. The Dingell-Johnson Act applies a 10 percent excise tax on sport fishing equipment.

Monies from these two federal funds are distributed among the states on the basis of respective license sales and total land area in proportion to the entire license sales and land area of the United States. States must match these grants with \$1 for every \$3 of federal money used.

Another change in the reapportionment of Pittman-Robertson wildlife funds to the states is indicated in a recent Department of Interior announcement. A legal opinion of a U. S. solicitor would base a part of the reapportionment formula on the number of persons licensed to hunt, rather than on total license sales as is now the case. States which have several types of hunting licenses could suffer cutbacks under the proposed system. This would not affect the calculation of P-R funds for Pennsylvania. Monies apportioned to the Keystone State have always been collected on the basis of the number of "general" hunting licenses sold to residents and non-residents of the Commonwealth. Under the new formula funds would be distributed in the next fiscal year, which begins July 1. Exact amounts will not be determined, however, until complete studies of license records are made in each state.

PGC Photo by Bob Parlaman

TENTH STUDENT OFFICER CLASS presently undergoing training at the Game Commission's Ross Leffler School of Conservation near Brockway are shown on a field trip to the Pymatuning Refuge and Museum. Left to right, kneeling: Muir, Sitlinger, Moore, Leonard, Merz, Nolf, Hilbert, Bower, Martz, Wiker and Peoples. Standing: Superintendent Donald E. Miller, Bond, Haines, Curfman, Rockwell, Swigart, Lavery, Martin, Anderson, Watson, Vesloski, Young, Donahoe, Bittner, Toombs, and Asst. Supt. Roger J. Wolz.







# Bow Season Preparations

By Tom Forbes

**T**HE Pennsylvania State Archery Association State Championship Field Tournament sponsored by the Bradford Sportsmen's Association marked the end of the 1959 tournament season for Pennsylvania field archers. The expert and the novice have vied with one another in scheduled competition on club field courses scattered throughout the Commonwealth. Twenty pins decorate many a shoulder quiver loaded with aluminium target arrows which cost the bowman from \$25 to \$30 per dozen. Instinctive or Free-Style

the heavy hunting bow is rarely seen on the standard field course. Today, tackle formerly seen only on the target line is a familiar sight on the field course. Shooting 56 or even 28 targets with a heavy bow can be a gruelling grind and field shooters have learned that they can consistently shoot better scores with a light weight bow. Many a bowman has been frustrated by blanking targets near the end of the last round because he is worn out physically. So we shoot the light weight bows, have a good time, and are satisfied or nearly so with our scores.

In this round of competition and enjoying the company of our fellow bowmen on the standard field course we frequently loose sight of the primary objective of the field shooter which is to use his bow as an efficient



weapon in the hunting field. We shoot over familiar territory. We aren't fooling ourselves and can state the exact yardage from the shooting pin to the butt on every target on our home course. We use the target face as a distance indicator and try to kid ourselves that we shoot instinctively. On the average field course there is little to differentiate between the methods employed by the bowmen and those employed by the target archer shooting at measured distances from a fixed shooting line.

Now is the time to do an about face and get into condition for the October hunt. First we have to revise our mental outlook. We are no longer concerned with scoring four arrows on a single target. We want a hit with the first arrow; knowing full well that there rarely is an opportunity for a second shot. We need practice with the bow we will use for game and we need to shoot broadheads to become accustomed to their flight trajectory. The broadhead with its longer shaft will appear strange after shooting target arrows during the summer on the field course. You can get an argument any time over the practicability of the shoulder quiver for carrying arrows on a hunt but for carrying a large quantity of arrows it can't be beaten.

Load the quiver with some of last year's broadheads. They do not need to be razor sharp. In fact they will be easier to dig out of stumps if they are dull. Carry a belt axe in a sheathe and a pair of pliers. Perhaps the red bugs and chiggers are still plentiful so take your favorite dope and avoid the unpleasant effects that result from the bites. Pick a location on marginal land that has plenty of old rotten stumps, clumps of grass, scattered pieces of cover, and plenty of opportunities for up and down hill shots. Your own safety should warn you that arrows should remain in the quiver until you are ready to

shoot. An arrow knocked in the bow can cause a painful and maybe a serious injury if you make a misstep, stumble or fall. On a hunt the eyes are fixed on the cover to the front searching it for game and little attention can be directed to the ground where you are walking. As you walk along a stump comes into view beside some brush. Stop in stride. Don't arrange your feet in the accustomed shooting stance you have been using on the field course. Bring your bow to full draw and release. You may and probably will feel awkward. You will probably have forgotten the flatter cast of your heavy hunting bow and will overshoot your target. Resist the impulse to draw and release a second arrow from the same position. Remember that stump is substituting for a deer and you get no second shot. Continue walking toward the stump with the object of retrieving your arrow. Stop again; this time with the other foot advanced and shoot from this position. Guard against the common fault of shooting *at* the stump. Shoot for a particular spot on the stump just as you must do when you shoot at a deer. An arrow has to be aimed to strike a vital area. Just shooting *at* a deer isn't enough.

Let us assume that the second arrow went right to the spot you selected on the stump. Again don't repeat the shot from the same position. Drop to one knee, cant the bow so that the lower limb is free to move without striking the ground. For right hand shooters the top bow limb inclines to the right. Loose a third arrow at the spot on the stump. Study the result. Did the change to a kneeling position effect the trajectory of the arrow? You may have to shoot under a limb at your quarry and you want to know just where to hold when an opportunity arises. Shots in the hunting field must be taken as they occur. If you try to move into a better shooting position you may





PGC Photo by Batcheler

**ASK PERMISSION FIRST** before hunting on privately-owned land. A pre-season visit with a farmer or forest land owner will help make bowhunters more welcome and will assure the landowner that you are a true sportsman.

get only a running shot at a fast moving piece of game.

Time to retrieve the broadheads and evaluate the results. If you did not achieve the results you expected determine the corrections that you must apply on your next target. Stumps that appear to be well rotted from a distance may still be sound and tough in spots. This is where the hand axe and or the pliers make it easy to release the broadhead without damage. If you blanked the stump your arrows should not be difficult to locate as you shot all three arrows while walking on a fairly direct line to the target.

Look for the next target. Perhaps you select a tuft of grass or weeds just about the height of a deer's chest. Repeat your performance and remember shoot only a single arrow from any one position. No second shots which most of us can place fairly well. As an experiment try a shot at a mark which you can see through an opening in some brush. With the rifle's flat trajectory the shot would present no difficulty, but with your bow is that opening high

enough to allow the arrow to pass through at the top of its trajectory? Try this shot from several distances and the knowledge you gain may stand you in good stead if you spot a buck through an opening on your fall hunt. It is a pretty sure proposition that when you spot the deer he can also spot you and you are not going to be given the opportunity to move out of line of the brush for an unobstructed shot. The particular value of the heavy hunting bow is its relatively flat trajectory, particularly over short distances; and the arrow follows close to the line of sight. This is particularly advantageous in the situation just described and on all short ranges, as the problem of elevation is a minor one.

Imagine a situation when you are walking slowly and carefully through your favorite hunting territory and a twig snaps off to your left and slightly to the rear. Can you swing around without changing your footing and loose an arrow from this position with the accuracy necessary to hit that buck that was trying to sneak away after you had passed him in

his hiding place? You will have only a fraction of time to make the shot and certainly not enough time to about face and assume your regular shooting stance.

Walk to the edge of the nearest ravine or gully. Pick a mark in the bottom thirty yards or so distant. *If* your field course has no steep uphill and downhill shots or if you have been unable to score on these particular targets you will probably overshoot the mark. You must hold a lot lower when shooting downhill compared with shooting the same distance on fairly level terrain. These situations actually arise and deer have been overshoot which were bedded down in bottom pasture land because the bowhunter did not compensate for shooting down at the deer from the crest of the sidehill. Here we make an exception. If you overshoot with the first arrow, shoot several more until you are thoroughly convinced that you must make this allowance when you shoot downhill. Then move to another location and try to make the first arrow count.

When you have retrieved your arrows from the valley floor, reverse the procedure and pick a target on the slope above you. Here the rule is the reverse of the former case. If you want a hit hold *high*. If, when you loose your arrow, you fall short of the mark, shoot several from the same position until you have established clearly in your mind the adjustment you must make when you spot your quarry on the hillside above you.

Right handed bowmen have difficulty in shooting to the right. Especially so if the right foot has been advanced in the act of stepping forward. If you can do it and register consistent hits, fine. If you can't, then like a lot of us you will just have to take that additional one step forward with the left foot and run the risk of having the white flag go up and your buck leap to safety.

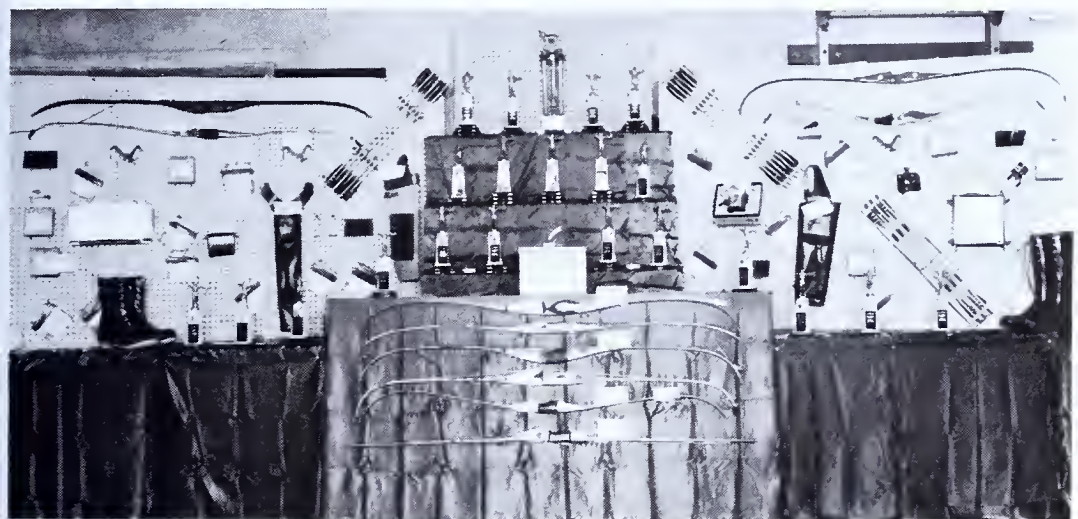
If you are one of the tree hunting

fraternity of bowmen, and there are a number of them, don't wait until the evening before the opener to rig up your shooting platform. Of all uncomfortable shooting positions, shooting from a tree tops the list. You have to accept certain limitations. There will be certain openings which will permit an unobstructed shot to the ground in the vicinity of the tree. The back of a deer is a very narrow target and you will do well to take plenty of practice shots from your perch before the season opens. It takes a lot of will power to keep from getting the jitters while waiting for a deer to move into position where you have a reasonable chance to make a successful shot.

What we have talked about is not the familiar field round shoot, neither is it the actual hunt and your opportunity may come in the least unexpected locality and under totally different conditions than those which you have practiced. Never-the-less you will be better prepared for the conditions you will meet in the hunting field if you will get out there now and try to register your hits under conditions and in circumstances which you can reasonably expect in the hunting field. If you are in deer territory, you can sharpen your powers of observation and may be able to practice getting into reasonable bow range on the actual quarry. If you spook the game you will at least have learned what not to do when the chips are down and the first arrow has to do the work. A twenty pin doesn't mean a thing to a deer.

Caution: Any quiver you use should have the broadheads completely enclosed and the pocket should be metal lined. Self inflicted wounds have accounted for the accidents to bowhunters in past seasons. Don't take a chance and never carry an arrow nocked in the bow. It's dangerous to you and to your hunting companion. A real bowhunter is more than a good shot. He or she can stalk, trail, and recover his game.





## Second Annual Broadhead Shoot Scheduled By Meadville Archers

If you own a bow, can borrow one, or just like to see a group of archers having a good time, put a circle around Sunday, September 27, 1959 on your calendar. This is the date to set aside for the Meadville Field Archers' Second Annual Broadhead Deer Shoot.

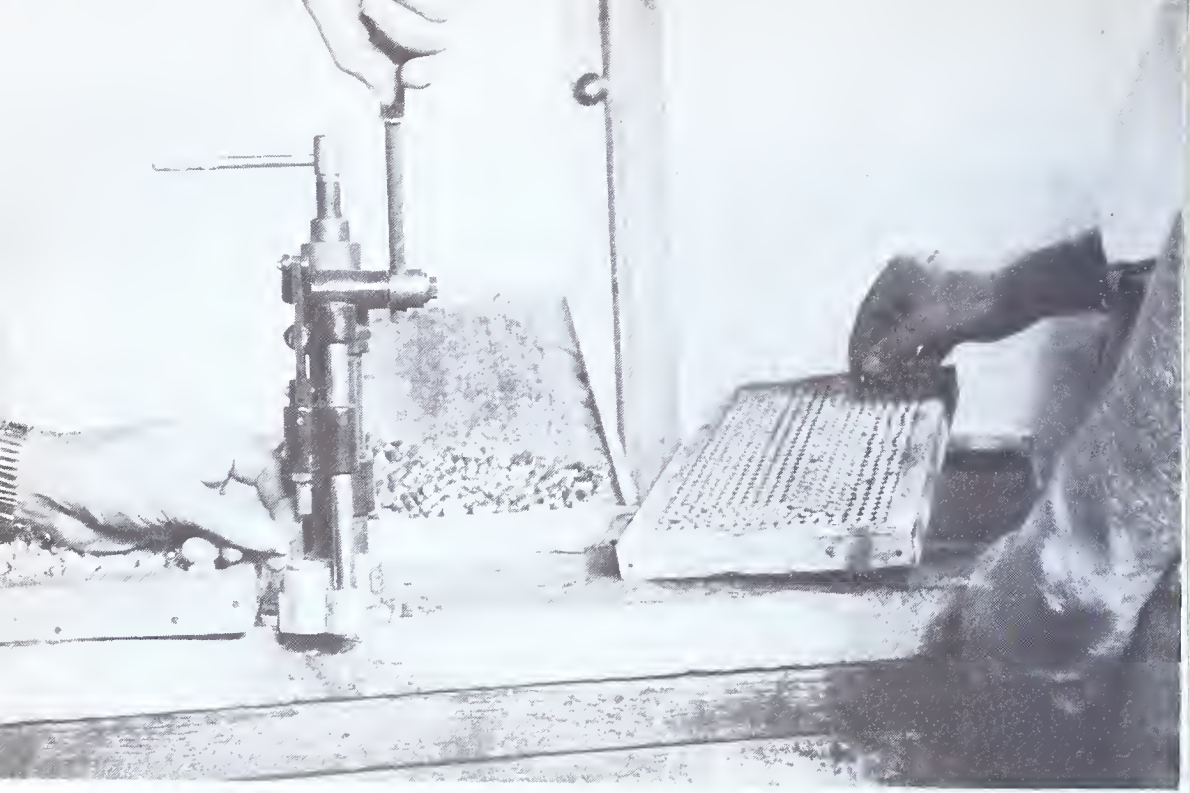
Club members have been working on this shoot since January first and it has been arranged so that it will be ideal for the "backyard bowman." He will have just as good a chance, in fact, as the organized field archer because \$1,000 worth of fine merchandise will be given away in door prizes along with 22 trophies for shooting ability.

Purpose of the shoot, however, is to give archers an opportunity to sharpen their shooting eyes before the opening of Pennsylvania's bow hunting season on October 3. The shoot is a 28-target course of life-sized deer silhouettes standing under actual hunting conditions. Some will be in "big woods," some in brush, and some in the open field. One of

them will be a running shot, the deer bounding out of trees on one side, scooting across an opening and into trees on the other side. If you hit this one, you will win an award ribbon. All participants must use broadheads except children under 12 years of age. Field arrows may be used on the novelty shoots only.

Registration will begin at 9 a. m. and last until 1:30 p. m. The first 200 archers to register will be given a free shoulder patch to commemorate the shoot. Free coffee and doughnuts will be served the "early birds" until 10 a. m.

Family groups are encouraged to attend the shoot. Picnic tables and clean restrooms are available. Registration fees for the shoot are \$2.00 for men, \$1.50 for women and \$.75 for children under 12. The registration fee entitles everyone to a chance at the door prizes. Anyone desiring overnight accommodations in the area may contact Robert Wagner, R. D. 1, Meadville. The club house and range are located just outside Meadville off Route 86. The route will be well marked with running deer signs.



# Hand Loading for Economy and Accuracy

(PART II)

By Jim Varner

**L**AST month we lead up to the more serious phases of hand loading. In our discussion we stressed the fact that if you wish to become an expert rifleman, firing practice is essential. The least expensive and most satisfactory way to obtain a lot of practice is to reload. If you want to increase the versatility of your rifle, pistol or shotgun, the answer again is to reload. If you desire a fascinating hobby allied with firearms, learn it right by reloading your own.

Assuming you have selected at least a Lyman 310 nut-cracker type tool complete for one caliber and an inexpensive apothecaries scale, let's

start assembling our first 25 or 50 rounds of cartridges. Select cases which have been fired in your particular firearm so your first operation will be neck resizing only. Full length resizing is usually unnecessary unless the cartridges have been fired in another firearm of the same caliber. Sometimes repeated firing in the same firearm will make extraction difficult and chambering unsatisfactory. Then, full length resizing is again necessary.

The second operation of your new adventure will be the removal of the fired primer. Check the primer pocket for corrosion and burrs. Most of our military cases have crimped-in primers which are hard to punch out with anything but the strongest tool steel punch of suitable dimensions. After you have forced such primers out of their pocket, however, it is necessary to clear the lip of the primer pocket with a primer pocket





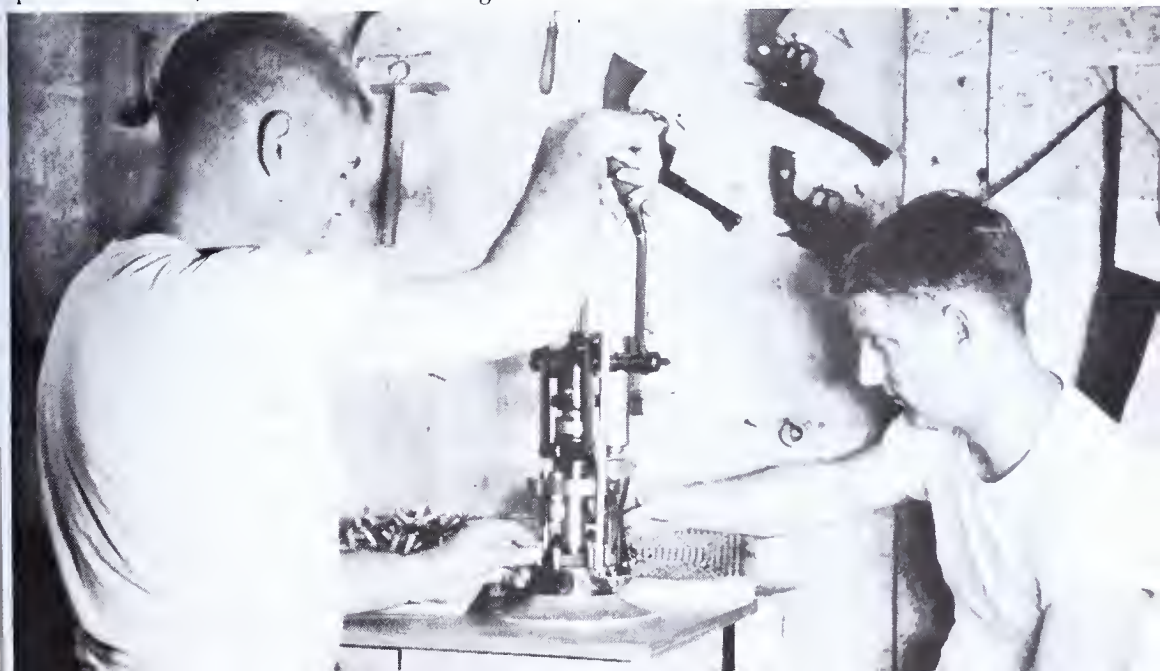
reamer before trying to reprime. Under no circumstances enlarge this pocket so a new primer will not fit snugly as they do in non-military commercial cases. This stage is called decapping.

Before we go farther in our reloading perhaps the third stage should cover more thoroughly the subject of full length resizing of all cases. When cartridges are to be used in several arms of the same caliber like police or military organizations, full length resizing is a "must." For revolvers, try each case in the cylinder to make sure it enters freely and the cylinder rotates easily. For automatic pistols, rifles and shotguns try each case in the chamber by completely closing the action. If you have to full length resize with a simple die which requires driving the case in with a soft hammer or pressing it in with an arbor press or vise be sure to lubricate the case with a thin film of suitable lubricant. This job can be quite a chore, especially where strong, large-sized rifle cases are concerned. The powerful bench tools do this re-

sizing easily and much more satisfactorily. **Warning:** never force an oversized, swelled or mutilated cartridge of any kind into a firearm. Either salvage it or put it where it will not cause trouble later. **Warning again:** Never attempt to full-length resize bulged or badly swollen cases like 300 Savage, 308 Winchester or 30-06 which have been fired in some of the transformed Jap, Russian or other sloppy oversized chambered rifles turned out by careless gunsmiths and irresponsible dealers. Junk such cases as well as the arms if you happen to own one. They are dangerous. Avoid over-working good cases by continued full length resizing. This makes the brass brittle. Neck resize only where possible.

Our fourth stage deals with neck expanding for admittance of the bullet. Neck and full-length resizing makes the neck of the case too small for the bullet to enter readily unless it is a boat-tail type. This makes it necessary to expand the inside of the neck to a uniform diameter slightly smaller than the bullet you intend to

**AUTOMATIC HAND-LOADING PRESS** is used by Steve Kish, left, Pennsylvania Game Protector and fellow officer John Altmiller, Lackawanna County in reloading of 38 Special cases. Each time the lever is pulled down, this precision machine decaps the case just inserted, full length resizes the case next to it, reprimers the third case, neck expands and opens the fourth, and measures and charges the fifth.



use. The first stage of the neck expanding plug takes care of this by enlarging the neck to .001 or .002 of an inch smaller than the diameter of the bullet. This produces a friction tight seal that holds the bullet from being pushed back on the powder or from dropping out of the case. The second step of the plug is .001 or .002 of an inch larger than the bullet and opens the mouth of the case sufficiently to admit a bullet freely and prevent a lead bullet from being shaved on the edge or a flat based jacketed bullet from buckling the neck of the case. Loading dies, made to crimp, force this slightly expanded mouth back to original diameter. For boat-tail bullets I never use this second stage of the plug.

Our cases are now ready for the fifth operation—seating the primer. The primer is the spark-plug of each round of ammunition you are loading. Select it carefully and remember it must be the correct one for the job intended. Keep your primers apart and labelled at all times. They may look exactly alike but they differ in physical makeup. This applies to both the 1½ size, now called 175, and the No. 2 size now called 210's. Each primer has three parts; a cup, an anvil and the priming explosive or pellet. Cups are usually made of brass or similar metal, the hardness and thickness of which depends entirely upon the types of cartridges in which they are to be used. Pistol primers usually have thinner and softer cups than used in rifles. Do not use pistol primers in rifle cases or rifle primers in pistol cases, even though they are correct in diameter. Such misuse of primers is always unsatisfactory and can be dangerous. Manufacturers of primers have charts of their primers as to diameter, catalogue number and their intended usage. Know your primers. Primers must be seated with a steady pressure that seats them to the bottom of the pocket. This is extremely important

as a poorly seated or mutilated primer can cause misfires, hang-fires, dangerous gas escapage and malfunctions. Never use a cartridge with a primer protruding above the level of the primer pocket. Pre-mature explosions from such can really wreck things.

The sixth phase of reloading is one requiring considerable research and experimentation as the shooter develops his technique. It deals with loading the powder. The apothecaries scale enters the scene here as well as the powder measure if you own one. Gun-powders are roughly of two kinds: black powder and smokeless. Both have further sub-classifications with each one numbered and designated for a certain job. As you observe from the picture in the August issue, there are about as many varieties of powders to select from as there are brands of cigarettes. This is confusing to the beginner, and right here I wish to warn you to load only one kind at a time and keep it under label; also keep a record of its performance. Never mix two or more varieties of powders even though they look exactly alike to the eye. If a batch of smokeless powder looses its identity either destroy it or use in small quantities to start camp fires. (Modern smokeless powder is either a single base or double base powder that starts as a straight cellulose or nitrocellulose chemical. From this point on its manufacture is too complicated to discuss even simply here. It does burn slowly and with great heat in the open air when used, in say, an ounce or less at a time. Actually it is not as dangerous as gasoline. The same powder confined under pressure ranging from 10,000 to 50,000 pounds to the square inch in gun barrels becomes a violent element. Black powder on the other hand is dangerous under all conditions. If you would attempt to burn even a tablespoon full near arms-length from your body it would probably singe the eyebrows and hair. It





**MOULDING BULLETS** is a teamwork job for members of the Game Commission's North-east Field Division. Ed Gdosky pours the molten lead into a four-cavity Hensley and Gibbs 38 caliber mould held by Ed Divers. John Altmiller holds another similar mould while John Behel looks on. Thousands of bullets are moulded at a time for use by Division personnel on the range.

burns as violently un-confined as when confined.)

You have often heard of a lost hunter twisting the bullet out of a big-game cartridge and using its powder charge to help start a fire under snow and rain conditions when a match was not hot enough to ignite. You never heard of one doing the same job with black powder except in a fiction story. Black powder is probably the oldest explosive we know of. Today it is practically obsolete and is used only by gun-nuts, like myself, who enjoy using the old Colt percussion revolvers, the big black powder arms of years ago or who reload shot shells for the damascus barreled shotguns still with us. It is dirty, corrosive to brass cases and has an odor offensive to some, but despite all of its faults it still possesses a glamour that even many of the young shooters enjoy.

Before buying your smokeless powder be sure you have selected the correct one for your purpose. Be equally sure you get it, as the use of the wrong powder can not only be

unsatisfactory but dangerous. The action of a cartridge being fired is similar to that of an internal combustion engine. The primer is the spark plug, the powder is the highly compressed vaporized gas, the bullet is the piston and the cartridge case encased by the chamber is the cylinder. Violently expanding gases seek the only outlet which gives; in this case the bullet as it races out of the barrel. There you have it gentlemen, a modern combination using gases so hot they exceed the temperature of the electric arc; steels so tough they resist this heat for thousands of rounds with a minimum of erosion as well as hold the tremendous pressures exerted with maximum rifle loads. An interesting hobby you will say. Hercules and Dupont manufacture the powders you need. Hercules makes their famous Bullseye for standard pistol loads. This is a very dense powder requiring only a few grains to equal factory ballistics. This powder works well when thrown from a powder measure. Watch for double charges which will wreck your pistol.



SCORING TARGETS is a pleasant duty for field officers of the Commission's Northeast Division. This pistol range is located in Lackawanna County and sees constant use as the Pennsylvania Game Protectors practice regularly with their regulation sidearm.

Unique is the next one. It can be used for standard pistol loads as well as maximum. It works quite well in shot shells and is the best for light loads in hi-powered rifle cartridges. For example only 12 grains of it in the 30-06 back of a 110 grain jacketed bullet develops 1700 feet per second velocity—a fine turkey load and very uniformly accurate. No. 2400 is another popular Hercules number which can be used in magnum revolvers for extreme maximum loads. It is one of the best for small rifle cartridges up to the old 44-40 Winchester, and gives exceptionally good results in loads somewhat below the maximum in cartridges from 25-35 to 30-06. Where maximum loads are required, and you like Hercules products, use HiVel in all big game sizes. For years our most accurate International 300 meter load used 36.7 grains of HiVel back of the 172 grain boat-tail match bullet. This was a very low pressure number with a velocity of only 2200 feet per second but highly accurate. Try it some time in your 30-06. Red Dot and Herco shotgun powders

about completes the picture as far as the Hercules Powder Co. of Wilmington, Delaware is concerned. Red Dot is a favorite for trap and medium field loads while Herco is one of the best for Express and Magnum shells. All of above powders possess extreme versatility, in uniform burning, ease of ignition, low hygroscopicity and dependability even when misused. All are fine grained and adapt themselves to the use of the powder measure except HiVel which should be weighed on a scale due to its coarse grain.

Dupont's line of powders closely parallels Hercules in some respects. They have only one pistol powder which is No. 5066, replacing excellent No. 6, and suitable for standard pistol loads only. They still make the old bulk grey smokeless for shotguns and a new dense PB which replaced MX and M6X and is similar to Red Dot in performance. They no longer sell Oval to hand-loaders for use in magnum charges. For high powered rifles they have an excellent variety covering everything from light loads to the heaviest made. All rifle pow-



ders are coarse grained and should be weighed. Their numbers are as follows: 4759 for light loads; 4227 for small capacity cartridges; 4198 for medium sized cases; 3031, 4064, 4320 and 4350 for larger cases. No. 4350 is the coarsest grained one and is the best available for maximum loads with heavy bullets. Its slow burning characteristics makes it probably the safest powder of all. Volume One and Two on Reloading Information from *The American Rifleman* library sold by the National Rifle Association, Washington, D. C. are inexpensive and give you full particulars on above powders and how to use them.

Your last operation is seating the bullet. A loaded factory cartridge should be used in adjusting your seating and crimping die to the proper length. When you have seated a bullet in a reloaded cartridge, chamber it in the gun, close the action, then remove to see whether the bullet is seated out too far and was forced into the lands. Such a bullet will often stick in the bore, dump

all the powder into the action and mess up the whole works. In revolver cases lead bullets should be crimped in place. We will not go into the question of bullets available in the modern calibers. Whether you buy Speer, Sierra, Hornaday, Winchester, Remington or use a military jacketed product, you will find all very satisfactory. Here, I suggest you experiment till you find the one which appeals to you the most. As you check your first 50 cartridges, made all by yourself, I am sure you will develop a feeling of pride and anxiously await their test for manipulation and accuracy. Always remember to weigh each charge of powder for near maximum loads especially. Check the balance of the scale frequently and when in doubt keep a bullet handy pulled from a 22 long rifle cartridge as a test weight. This bullet weighs 40 grains in the solid form. In conclusion I will say few of you realize how rapidly the great fraternity of hand loaders is growing. Be in on the up-surge and get the utmost out of your firearms.

**FIRING LINE** action takes place each Wednesday forenoon as Game Commission' field officers practice with excellent handloads they make themselves. Scores average 243 over the N.R.A. pistol course.





# OUTDOOR FUN WITH A FUTURE



## Animal Sounds

By Ted S. Pettit

**A**NIMALS communicate with each other in several ways. They have sight, touch, smell, taste and sound signals that are used for various purposes from attracting a mate, defending their nest, den or young to expressing alarm, fear, annoyance or pain. Some forms of communications are purely accidental, some show a degree of intent on the part of the animal and some are the result of a reflex action.

The rabbit that left the scent trail as he hopped along the wooded edge in search of food had no intention of communicating with the fox or beagle that picked up the trail and set out in pursuit of the rabbit. That is an example of accidental communications.

The skunk, on the other hand, that raised his tail in warning when cornered by the dog or bobcat, stamped his feet, and only as a last resort used his well known weapon of defense, showed some degree of thought and interest. The skunk had control over his scent glands and used them as a means of sending an animal message only when he had to.

An example of communications by reflex action is the white-tailed deer. Anyone who has tried to stalk a deer with bow or camera probably has discovered that when an animal is feeding it is safe to move toward it. But

just before he lifts his head to look around, he flashes his white "flag." This tail movement apparently is a reflex action that almost always accompanies the lifting of the head.

Of all the means of animal communications probably the most interesting and useful to the sportsmen are sound signals of various sorts. For some of these signals can be imitated rather easily to cause the animal to come closer for better observation or an easier shot.

### Bird Songs

Everyone has heard the song of a robin at dawn or dusk on a spring or early summer day. This song is typical of the sounds made by many animals all for more or less the same reason. It is part of the procedure through which a robin selects a mate, breeds, nests and raises its young.

Many birds, when the time comes to breed and nest, stake out a territory on an area which they guard as jealously as human beings guard their homes and yards. The size of the territory varies considerably with the species of a bird.

A robin may have a territory measured in square feet up to a half acre or more. A wren may have a territory only a few feet on a side surrounding its nest. A tern or gull, birds that nest in colonies, may have a territory that is much smaller,



while the purple martin that nests in "apartment houses" may guard an area that is no more than 8 inches by 8 inches by 8 inches.

But in any case, the territory is guarded and should any other male, or in some cases should another bird of either sex of the same species enter the territory, the resident bird will attempt to drive it away.

The typical warbling song of the robin then says in effect, "This territory is mine—all other robins keep out." Song sparrows, orioles, catbirds, jays, wood thrushes and bluebirds are other backyard or farmyard or woodlot birds whose typical spring songs serve the same purpose.

Other animals too, have territories during their breeding season. From mice, rats and chipmunks up to fox and bears, many mammals have an area around their den or nest which they defend against others of the same species. In this defense they oftentimes use sound signals of one sort or another to proclaim their

territory and to warn others to keep out.

Two of our more interesting game birds make sound signals with their wings. These signals are part of the process in which they attract and select a mate and both are among the more interesting and delightful sounds in the nature.

The woodcock's courtship "song," heard over its "singing grounds" in spring probably is made with its wings, while the drumming of the grouse, which may be heard at any season of the year is made by the rapid beating of the wings as the bird perches on a decayed log or stump.

An interesting discovery was made several years ago. Naturalists wondered why grouse would drum at night when horned owls, their natural enemies, were most active, and not be killed in larger numbers. In testing the hearing of owls, it was discovered that the drumming of the grouse was at too low a pitch for the

**WOODCOCK "SONG"** heard over its "singing" grounds in the spring is made with its wings. Wind whistling through the three outer primary feathers produces a distinctive sound.



owl to hear. The owl could pick up sounds pitched only at high frequencies and as far as sound is concerned, the grouse was safe. Of course, the owl might see the movement connected with the drumming and swoop down on the grouse, but he could not hear him.

So one reason for bird songs or other sounds is related to mating and protection of the nesting area. But animals also have distinctive sounds they make in communicating with their young.

The female grouse, quail or turkey may "cluck" a warning to her brood, and the young birds freeze in their tracks or dive for cover. When the apparent danger is over, another cluck of a different kind will call the young back together again and they go on feeding as before.

Anyone who has stood on a beaver dam or close to a beaver house when the young were inside, knows the crying sound the young animals make. Fawns too, bleat softly when hungry, and the doe responds by going over to nurse them. Young foxes whine and whimper when hungry, as do young woodchucks, and young porcupines sound much like a baby when they are in distress or want to feed. These are all forms of animal sound signals and by listening to them and interpreting them correctly, we can discover much more about the animal, its habits and why it acts as it does.

Ducks and geese are well known for their sound signals made while in flight and it won't be long now til their sounds fill the night air.

Various birds migrate at night and feed and rest during the day. These calls apparently are a means of keeping the flock together when visual contact is impossible in the darkness. Warblers, vireos, thrushes and shorebirds oftentimes may be heard at night as they fly over and the experienced naturalist may frequently identify the birds he hears just by sound.

One of the best known sounds related to feeding is made by the various woodpeckers and the experienced outdoorsman can identify a woodpecker just by the rhythm and resonance of its hammering on a dead tree. From the downy with its rapid tattoo to the crow-sized pileated with slower, resounding pounding each of the birds has a more or less distinctive rhythm to its hammering.

Many a camper knows the feeding sound of another animal, if he forgot to place his axe or canoe paddle in a safe place. The gnawing sound of a porcupine is quite distinctive, and destructive, and one that I personally can do without. They once chewed two tires off my car—but there was no sound connected with it, unfortunately.

Animals make many different sounds in different ways to express different emotions or activities. In so doing they may be communicating with others or with man accidentally or deliberately.

The gnawing of a mouse, the chatter of the red squirrel as you walk through the woods, the scream of a rabbit caught by a bobcat, the grunts of a porcupine climbing a tree, the whistle of the woodchuck, the song of a hermit thrush, the rattling antlers of a buck, the bark of the fox, the rattling or hissing of a snake, the song of a tree frog or the croak of a bull frog, the grunt of a bee stung bear or the pounding of running feet on a woodland trail, all are animal sounds made in different ways to express fear, pain, alarm, warning, annoyance or other emotions.

The sportsman or other outdoor hobbyist who can interpret these animal sound signals and interpret them correctly has much more fun in the outdoors and may get more out of his hobby. Animal signals are fun in themselves, but they add tremendously to an appreciation and understanding of how animals live.





PGC Photo by Bob Parlaman

# Changing Styles

By Horace Lytle

**F**OR a hunting man to look over a list of A.K.C. registrations for any year will prompt considerable pondering. That Beagles currently top the list seems natural enough and as things should be. But after them there follows a scramble of hash, as it were. Little Bostons and Pekingese rate right along, numerically, with sizeable Collies and Boxers.

Don't sneeze! But as your finger runs down the list it will pass several tiny flea-catchers and muff-warmers before coming to Pointers! Ho hum! Shifting styles in pet breeds has always been somewhat of a rule. Popular when I was a boy was the Pug, of which you see but few now. The Airedale led for a while. Smooth Fox terriers far outnumbered their wire-haired cousins—but that's reversed as of today. There are but few breeds the placement of which in the list won't give you a start, from one angle or another.

In line with which fact is the Stud Book itself. A.K.C. registers more Irish Setters than English. In the





Field Dog Stud Book it's just the reverse by a wide margin. And so it goes—on and on down the line. Bird dog men almost universally patronize the F.D.S.B. On the other hand, Beaglers are equally loyal to the other book. No accounting for tastes.

What brings about the changing of styles? When it comes to pet dogs—nonsporting—I have never been able to understand. In the main, I think, it comes from people being gullible and following each latest fancy as a wind blows leaves. I believe New York City may house more dogs than any other city! WHY? I wouldn't know. I myself would never want to be bothered by any dog of any kind, in New York. Yet I have seen one woman going down Fifth Avenue with a Great Dane in tow. And the next one behind her leading a Doberman, while another lady is passing her with a Pomeranian under her arm. It's all beyond me,

and I'm more of a dog-man than any of them—if I do say so myself.

But if one doesn't understand style changing in pet breeds—what of it when sporting breeds are involved? WOW! Well, there's at least one thing in this connection that I believe we must contemplate. It still has to be a case of gullibility—yes, and by all means. But it has been brought about, too, by pheasant hunting. Largely conjecture, perhaps, but this is how it looks to me—

Pennsylvania grouse hunters know you can't beat a good Setter—or Pointer. Period. Your Southern quail hunter knows there's nothing to compare with a good Pointer—or Setter. Period. Nor is a rabbit hunter likely ever to be experimenting with Foxhounds. But with pheasants it's different. Those who hunt them with Bassets or Beagles may wax eloquent over the advantages of these little hounds. Spaniels saw slim use in the

IRISH SETTERS lead English setter registrations by the American Kennel Club but in the Field Dog Stud Book it's just the reverse.

Photo by Don Heintzelman







NEW BREED which has gained wide popularity in America is the Weimaraner, a recent import from Germany.

hunting fields of America until the ringneck came into the picture. Now Spaniels are widely used.

And so, with all kinds and conditions of canines also coming into the picture, the market is fertilized for more of the same. The old timer who knows his way around isn't bothered by all this. He but smiles, spits and goes his way, letting the gullible young fellows run around chasing the rainbows. I well remember when Freeman Lloyd backed the Springer Spaniel promotion in America. The entire persuasion hinged on the "mixed bag"—a dog over which either fur or feather could be bagged without performance on one type of game spoiling the dog for the other. The idea was practical and it took hold. This was just what the doctor ordered for a certain type of hunter. Your truly ardent wing-shot fancier merely looked the other way. Be which as it may, the Spaniels are here to stay.

Since then various *new* breeds have been played-up. Some too much so for their own *lasting* good. Because, great as canines can be—and as many of them are—they still have their limitations. A dog cannot grease your boots, clean your gun, get your breakfast, paddle your duck boat, find and retrieve your game—then clean and cook it! That's asking *too* much. Yet we exaggerate very little when we say that at least one new breed in

recent years was launched with proportions that saw almost no limit to the claims; claims that had the young gullibles chasing rainbows all over the map.

Your experienced hunter and dog man doesn't have to be swayed by any of these things. He has his convictions and knows what he wants. And if he wants his grouse *pointed* you'll never sell him a Spaniel—other than a Brittany. He'll find a Setter that suits him. And he'll know there *is* such if he'll but search 'til he finds him. That's all there is to it.

My own personal preferences for a dog might not fit with yours. Even in the woods I happen to like my dogs wider than some—and I surely want them fast, though deadly staunch! If that doesn't suit you, there's no need to run off to Africa, Australia or Germany for something "new." Dogs are as individual as thumb prints—even as you and I. You don't have to leave the time-tested breeds to find the dog of your choice. And this is true whether you hunt fur or feather—in any form. Any breed will have its slow dogs, fast dogs, dumb dogs, smart dogs, good dogs, bad dogs.

And remember this: Even in some "different" foreign breed you still have individual selection to contend with. Why not play it safer by sticking closer to home?

# Annual Questions On: Prospecting

By Larry J. Kopp

**Q. Where should one look for fox signs?**

A. Check along woodland roads and trails for droppings and scratchings. Look especially for droppings on rocks in the middle of roads—a certain fox sign. It also pays to check for signs along fence-rows, railroad tracks, and along the edges of fields bordered by woodland.

**Q. Where should one prepare fox set locations if signs are found?**

A. In the nearest open field, preferably near a corner. A rise or hump located somewhere in a field is also an excellent spot for a trap site. Equally good set locations can be prepared where several woodland roads form an intersection. Other clearings, such as those left by abandoned sawmill operations within the woods proper, are also worth looking into.

**Q. Why is it important to prepare bait hole fox set locations in advance?**

A. It saves a lot of time; many foxes get used to seeing the location; but equally important, previously prepared locations do not attract as many cottontail rabbits as does freshly dug earth.

**Q. Should I use any bait or lure at trapsites made before actual trapping operations start?**

A. Not unless you can definitely afford it. And even if you can afford it, you are taking a chance that foxes will get so used to your set location that they may lose all interest in it by the time you set traps.

**Q. How far should fox traps be spaced apart?**

A. They should not be spaced apart in the same sense as you would space fence-posts. Actually, there is no such thing as spacing fox traps—

you set them where you find signs. You can set one, two, or even three fox traps in one large field. One at an intersection along woodland roads. Bear in mind that one fox set in a field will, in due time, catch just as many foxes as two or three.

**Q. What other type of fox trapsites can be prepared in advance?**

A. The water, or stepping stone set, covered in a past issue of GAME NEWS, can be prepared in advance. However, since water levels change, some trappers do not make water sets until actual trapping starts. This also applies to the scent-post set.

**Q. Why do some experts object to making fox sets in apple orchards?**

A. Too many rabbits and opossums attracted by fallen apples wind up in your traps!

**Q. Why should fox set locations be situated on the south side of hills?**

A. It's warmer on the south side, which means that your traps will not freeze solid as soon as they would on the north side. After a heavy rain, the south side of a hill dries much sooner, allowing you to re-make sets immediately. Besides, foxes know that mice and insects are far more abundant on the south side of hills, and thus do most of their hunting there.

**Q. If I discovered an ant hill upon which foxes obviously like to rest, should I leave it and make a set on top of the hill when I commence trapping?**

A. You can, and with success, too. However, if there is evidence that foxes often rest upon the ant hill, they would be sure to notice any slight change or disturbance. So be foxy and prepare a dirt hole set about ten yards away!



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# Pennsylvania Official 1959 Open Seasons and Bag Limits

(Regulations apply for Hunting License Year, September 1, 1959 to August 31, 1960)

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 31 will be 8:00 A. M., EST. On other opening days, and otherwise during the season for upland and big game, the shooting hours daily are from 7:00 A. M. to 5:00 P. M., EST, excepting from July 1 to September 30, inclusive, 6:00 A. M. to 7:30 P. M., EST, and the hours for the October archers' deer season, which are 6:00 A. M., to 5:30 P. M., EST. (FEDERAL REGULATIONS FOR SEASONS, BAG LIMITS AND GENERAL SHOOTING HOURS ON MIGRATORY GAME BIRDS WILL BE ANNOUNCED LATER.)

UPLAND GAME (Small game possession limits below)	BAG LIMITS		OPEN SEASONS	
	Day	Season	First Day	Last Day
Ruffed Grouse .....	2	8	Oct. 31	Nov. 28
Wild Turkeys (see below certain counties closed)*	1	1	Oct. 31	Nov. 21
Squirrels, Gray, Black & Fox (combined) .....	6	30	Oct. 31	Nov. 28
Ring-necked Pheasants, males only .....	2	8	Oct. 31	Nov. 28
Rabbits, Cottontail .....	4	20	Oct. 31	Nov. 28 AND
Rabbits, Cottontail .. (not more than 20 in combined seasons) ....			Dec. 26	Jan. 2, 1960
Bobwhite Quail .....	4	12	Oct. 31	Nov. 28
Hares (Snowshoe Rabbits) .....	2	6	Dec. 26	Jan. 2, 1960
Raccoons (hunting or trapping) .....	Unlimited		No Close Season	
Woodchucks (Groundhogs) .....	Unlimited		No Close Season	
Grackles .....	Unlimited		No Close Season	
Squirrels, Red (closed October 1 to 30, inclusive)	Unlimited		All mos. (exc. Oct. 1-30)	
Bears, over one year old, by individual .....	1	1	Nov. 23	Nov. 28
Bears, as above, by hunting party of three or more	2	2	Nov. 23	Nov. 28
DEER:	Bow and Arrow Season—Any sex, regardless of size. (Requires Hunting License and Archery License, but no Antlerless Deer License) .....		(only one deer for combined seasons)	Oct. 3 ..... Oct. 30
	ANTLERED DEER—Regular Season—Male with two or more points to one antler: Provided, a male deer with an antler three or more inches long without points, measuring from the top of the skull as the deer is in life, shall be considered legal, by individual .....			Nov. 30 ..... Dec. 12
	1		1	
	ANTLERLESS DEER SEASON—(Requires Hunting License and Antlerless Deer License), by individual .....			Dec. 14, 15 and 16

**NO OPEN SEASON**—Hungarian Partridges, Hen Pheasants, Sharp-tailed Grouse, Cub Bears, Elk, Otters.

## FURBEARERS:

Skunks and Opossums .....	Unlimited	No Close Season
Minks .....	Unlimited	Nov. 21 ..... Jan. 16, 1960
Muskrats (traps only) .....	Unlimited	Nov. 21 ..... Jan. 16, 1960
Muskrats (traps only) .....	Unlimited AND	Feb. 13 ..... Mar. 19, 1960
Beavers (traps only) state-wide .....	5	5 Feb. 13 ..... Mar. 19, 1960

## SPECIAL REGULATIONS

**TURKEYS—COUNTIES CLOSED**—\*Adams, Cumberland, Perry, York and that part of Franklin south and east of U. S. Route 11.

**POSSESSION AND TRANSPORTATION LIMITS** of legally-killed small game shall mean not more than the daily limit for the first day nor more than an accumulated total for each succeeding day of the open season for each species; but not in excess of the season limit, regardless of where held, stored or found in possession.

**DEER**—Even though there are three separate seasons for taking deer, a hunter may not kill more than one deer during the three 1959 seasons, whether hunting individually or with a camp or hunting party. An Archery License is required during Bow and Arrow Season. Issued only by County Treasurers at a fee of \$2.15, and the Department of Revenue, Harrisburg, at a fee of \$2.00. Antlerless Deer Licenses are issued only by County Treasurers at a fee of \$1.15, and valid only in the county for which issued. Farm occupants may hunt for deer during the Archery Season, as well as the Antlerless Deer Season, without a license on lands resided upon, or those immediately adjacent with the written consent of the owner or lessee. Under the law, no application for an Antlerless Deer License shall be approved, or license issued, to a nonresident prior to November 14, or after December 13, 1959.

**BEAVERS**—No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to the Game Protector in District or County where trapped.

**TRAPPING**—Traps for furbearers not to be placed, staked or set before 7:00 A.M. on the first day of open seasons. The season indicated for Trapping closes at 12:00 o'clock Noon on last day. Traps must be tagged with metal name tags.

**SNARES**—The use of snares is prohibited in all counties except by special permit.



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# PENNSYLVANIA GAME NEWS

OCTOBER, 1959

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## THE STORY BEHIND THE COVER

SOME of the fondest memories which many adults have of childhood include a wonderful sport of make believe. This bit of youthful nonsense requires a dark night, a lonely swamp, a burlap bag, several sticks, a lantern and a varying degree of patience. Those who have never

been taken on a "snipe hunt" have missed something in life; those who have spent fearful hours on the runways of the "elder britches" will retain vivid recollections long into adult years of what probably was their first hunting experience.

The mysterious bird which young snipe hunters never bagged is theoretically the famous member of the shorebird family shown on this month's front cover. The Wilson's snipe or jacksnipe does not make runways through the marsh grass on a summer night nor is he foolish enough to run into a burlap sack. It's probably just as well, however, since that type of hunting would be illegal, not only in methods used but in the wrong season.

But come fall, the snipe does become fair game for more mature hunters. Not many sportsmen in this day and age are familiar with this migratory game bird. His upland cousin, the woodcock, which he closely resembles, is far better known. And yet the Wilson's snipe has a devoted band of followers.

Snipe breed from Alaska to New Brunswick south to Southern California and Pennsylvania. They winter south to Brazil but occasionally as far north as Nova Scotia. Their migration flights are as unpredictable as the weather; one morning a marsh may be filled with them, the next they are gone. They feed largely on insects and other small animals, can dive and swim well and raise one brood of three or four young annually.

It is difficult, perhaps, to picture them as game birds and yet there are a few avid sportsmen left who would rather hunt them than wild turkeys. The fun is not so much in the hitting as in the shooting. A snipe hunter's trail through a marsh is usually marked by a long string of empty shell cases. When flushed (and they would rather run and hide), Wilson's snipe take off in a fluttering flight calculated to make even the best shot a bit cross-eyed. Their flight speed ranges up to 70 feet per second, not as fast as some other game birds perhaps but much more erratic, especially over a wind-blown marsh. And when the sportsman gets lucky enough to bag a snipe he is in for a delicious dish. Snipe are noted for the quality of their flesh even as their relative, the woodcock.

And so each fall, a few Pennsylvania sportsmen with shotgun in hand and preferably a good retriever at heel seek the eastern marshes and the few spots along our inland rivers where snipe may be found. Some of them no doubt carry humorous memories of a single snipe hunt on a bygone night of boyhood, but all of them carry a respect and admiration for a mysterious bird whose flight pattern is not easily followed over a shotgun barrel.



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## PENNSYLVANIA GAME NEWS

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OCTOBER, 1959

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By Margaret Blair

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Editorial . . .

# The Three Dollar Duck Stamp

By D. H. Janzen, Director  
Bureau of Sport Fisheries and Wildlife  
United States Department of the Interior

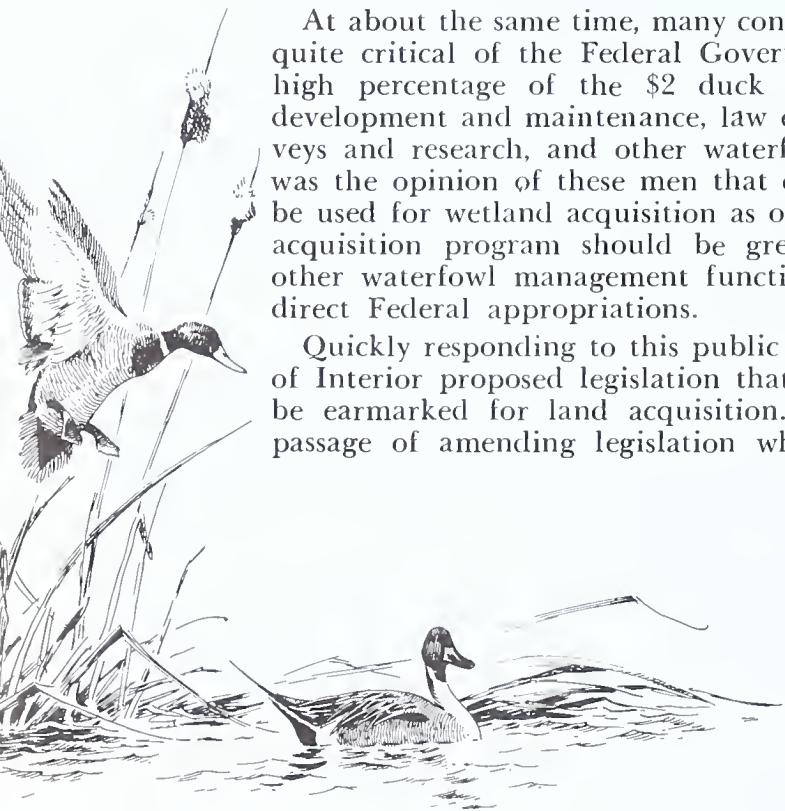
**W**HY a \$3 duck stamp?

Two years ago a task force of our employees, representing a cross-section of field and Washington personnel, was assigned the job of determining the most important needs facing fish and wildlife in the field of Federal responsibility. Advice and recommendations were sought from all possible sources, including State Conservation Departments, National Conservation Organizations, Federal agencies.

Of the many national problems considered, the one involving preservation of our wetlands stuck out like a sore thumb. It was quite obvious that the steadily continuing loss of our pot-holes, marshes and small lakes, so necessary for migratory waterfowl and other aquatic wildlife, was a problem of first magnitude requiring solution if duck hunting was to continue as a national sport.

At about the same time, many conservationists were becoming quite critical of the Federal Government for utilizing such a high percentage of the \$2 duck stamp receipts for refuge development and maintenance, law enforcement, waterfowl surveys and research, and other waterfowl management needs. It was the opinion of these men that duck stamp receipts should be used for wetland acquisition as originally intended, that the acquisition program should be greatly stepped up and that other waterfowl management functions should be financed by direct Federal appropriations.

Quickly responding to this public sentiment, the Department of Interior proposed legislation that all of the receipts should be earmarked for land acquisition. The final result was the passage of amending legislation which earmarked all of the





duck stamp receipts for land acquisition, raised the price of the duck stamp to \$3, authorized the opening to hunting of not to exceed 40 percent of any national wildlife refuge, and excepted the purchase of small production areas from the provisions of the Migratory Bird Conservation Act.

Where does this program stand as of today? We have a problem, and a most serious one—one we had not planned on, although we knew it might always occur. In anticipation of stepping up our land acquisition program from around \$1,500,000 a year to one running between six and seven million dollars, we have worked hard in getting a backlog of projects approved by the Migratory Bird Conservation Commission, and securing options on as much land as rapidly as possible. This action was taken because every year our purchase opportunities for wetlands are decreasing and we will have to pay more for the lands we can buy. As a result we now have options on enough land to obligate all of the funds made available to us for this coming fiscal year.

Unfortunately—and this is the real problem—Mother Nature, in the form of a severe drought in the duck production center of the Canadian provinces and in the Dakotas, will force us to curtail the hunting seasons this fall. This undoubtedly will directly affect the sale of duck stamps and we fear that the reduction in receipts will be serious enough to practically stop all further optioning on land acquisition for the next 12 months.

We still hope that Mr. Duck Hunter will have enough faith in the future of this sport to contribute his \$3 for a duck stamp, even though the hunting prospects this fall look pretty grim. This \$3 investment in wetlands is an insurance payment against the permanent retirement of his duck hunting equipment and his dreams of future duck hunting trips for himself and for those who come after him.

The waterfowl habitat picture may look pretty dark, but there is absolutely no question in my mind but that unless we are successful in greatly slowing up the wetlands loss trend of the past 15 years, duck hunting as we now know it will rapidly become only a memory for most of those participating in this sport today. The American public in the final analysis will have to determine whether it wants to pay the price.





# WALKIN' SHOES

By NED SMITH

## First Aid For Ducks

1. What is our smallest merganser?
2. Why are most wild ducks expected to be somewhat scarcer this year?
3. Which has a long bill and low "forehead," the canvasback or the redhead?
4. What duck is frequently identified by its alarm cry—"whoo-eeek, whoo-eeek?"
5. What duck wears a white, fan-shaped crest?
6. The canvas-back is one of the slower fliers among ducks. True or false?
7. What is the body color of the redhead?
8. During our duck season the male and female ruddy duck are colored nearly alike. True or false?

**D**YED-IN-THE-WOOL duck hunters give little thought to the uplands these days. You can see them wherever there's enough water to attract a few quackers, sniffing the breeze and eagerly scanning the sky. Yesterday I watched a figure on the river bank squinting through binoculars at his spread of decoys offshore. He's there every afternoon five minutes after the factory whistle blows, checking the river level and counting and admiring the wooden mallards riding jauntily on the sparkling water. October 24 is his big day and he wants everything shipshape.

Nearby a be-whiskered wildfowler

with paint brush in hand smooths out the final strokes on his ancient turn-over duck boat. One fellow I know is out along the creek at this very moment—plugging for bass, he says. I happen to know he's scouting for a likely place to bag a few "crick ducks" on opening day.

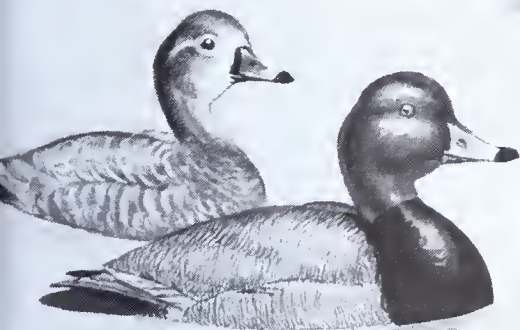
Yes, duck hunting is a good thing to look forward to. Unfortunately, the 1959 season is not expected to be a particularly rewarding one. Drought conditions in the northern breeding grounds have cut waterfowl production to the bone, with the result that there will be considerably fewer ducks traveling the flyways this year than usual. To assure an ample breeding stock for next year the waterfowl season for '59 has been shortened and limits reduced. In the case of several particularly hard hit species the daily bag and possession limit has been reduced to *one*.

Certainly no sportsman worthy of the name will deliberately over-shoot game of any kind. Nevertheless, too many of these scarce ducks *will* be shot, simply because too many gunners can not identify these birds until it's too late.

There's little excuse for a duck hunter not knowing one duck from another. Anyone whose vision is good enough to hunt them in the first place can learn to distinguish the different species in flight or on the

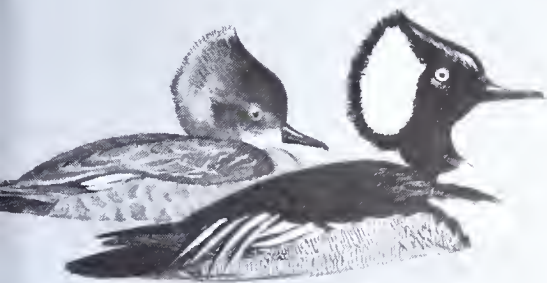
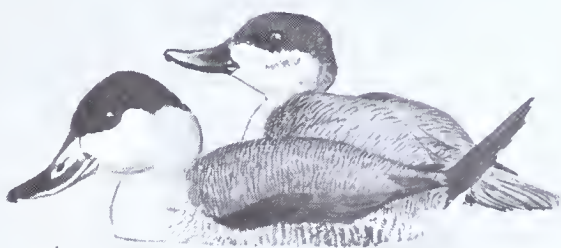


CANVAS-BACK



REDHEAD

RUDDY DUCK



HOODED  
MERGANSER

WOOD  
DUCK





NED SMITH

DUCK HUNTERS MUST KNOW the ducks shown in flight above. Can you identify them?

water. The March 1959 issue of *GAME NEWS* carried descriptions and pictures of the puddle duck species, emphasizing those features that make distant identification possible. Some time in the future the diving ducks and geese will be treated in the same manner. Right now, though, we'll concentrate on the five species that are the subject of concern this year—the canvas-back, redhead, hooded merganser, ruddy duck, and wood duck.

**Canvas-back**—You should have no trouble recognizing this famous duck. Its large size, long neck, and es-

pecially the whiteness of the drake are immediately apparent. In addition, the long, tapering head and bill are characteristics that can be discerned at a surprising distance. The male's body is predominantly grayish-white, his chest and tail black, and his head and neck chestnut brown. The female's body is light brownish-gray, the head, neck, chest, and tail yellowish- to reddish-brown.

In flight canvasbacks beat their pointed wings rapidly, exhibiting great power and attaining what is probably the greatest speed of any duck.



**Redhead**—This species is frequently confused with the canvasback. Actually, there's little resemblance. The redhead drake is a lead gray bird, much darker than the larger canvasback. The head is bright reddish-brown, the neck, chest, and tail are black. In profile it is utterly different from the can. The bill is short, the head short and rounded with a high "forehead." The female's head is similarly shaped and is pale in contrast to the brown body color.

The flight of the redhead is more frantic, less powerful than the can's. When colors are indistinct redheads can be confused with scaups, but can usually be identified by the absence of white on the upper wing surfaces. On the water the scaups are noticeably whiter.

**Ruddy duck**—The ruddy is a chunky little duck with a large, shovel-like bill and a long tail of stiff feathers which the male frequently carries erect. Unlike other ducks, the male moults his breeding plumage in August and September and spends the hunting season dressed almost like his mate. At that time of the year they are both dark grayish brown above, somewhat variegated with gray and chestnut. The cheeks are white (mottled with grayish brown on the female), the underparts are white irregularly barred with tan, and the sides are heavily barred with brown and ashy.

Its flight is quite fast and uneven, the wingbeats extremely rapid. In the air, as on the water, the ruddy is best identified by its chunky build and white cheeks.

**Hooded merganser**—This pretty bird is the smallest of our mergansers. The drake is predominantly

black and white, his most striking feature being a fan-shaped, black-bordered, snow-white crest. He could be confused only with the bufflehead, a small diving duck that has a **round, puffy** head and shows much more white on the body. The female is a dusky brown bird with a cinnamon buff crest that makes her identification easy, too. In flight the drake's crest is compressed, but shows as a thin white line. The shape of the head is unmistakably even when the colors can not be seen. The hen in flight can be distinguished from other mergansers by her small size.

**Wood duck**—The handsome wood duck is not hard to identify. The drake's gorgeous coloring, graceful crest, and rather long tail are unmistakable. The grayish-brown female with her crest and white eye ring is nearly as distinctive.

These ducks sit proudly and buoyantly on the water, usually with the rear end elevated. When flushed they leap from the water, the male uttering an excited "whoo-eek, whoo-eek," the female crying "crek crek," distinctive alarm notes that immediately spell "wood duck."

In flight their long, spade-like tails, crested heads, and down-pointed bills are excellent field marks.

## ANSWERS TO THE QUESTIONS

1. The hooded merganser.
2. Because of drought conditions in the northern breeding rounds.
3. The canvasback.
4. The wood duck.
5. The hooded merganser.
6. False. It is one of the fastest.
7. Gray.
8. True.





# Beagles Go International

By Roger M. Latham

**D**O you know what the country's most popular dog is? And do you know what the world's largest sporting dog event is?

The answer to the first question is the beagle. Seventeen per cent of all registered dogs are beagles. And the answer to the second question is the International Beagle Futurity and Derby Stakes held each year (lately) right here in Pennsylvania.

During the week of the International about 2500 men, women and children gather to run their dogs or to watch the exciting competition between the top beagles of two countries. Competitors come from Canada, California, Louisiana, Texas, Wisconsin, Minnesota and many other far away places. And they bring with them hundreds of beagles worth a

fortune—every one a potential champion, proved and proved again in local competition back home.

We're not fooling when we say that these little dogs are worth a fortune either. Some sell regularly for \$5,000 as stud dogs and prices up to \$12,000 have been paid. Almost any of these high class pups at the International would bring two or three hundred, or more.

Yet, a cross-section examination of the owners and competitors reveals an interesting thing. Most of them are just ordinary people from all walks of life but with one great interest in common. As one handler put it: "We're everything from wealthy guys to truck drivers. Right over there is the Mayor of Northampton, Massachusetts. And see that big



fellow? He's Zeke Bonura, former White Sox big leaguer, from Louisiana. That gentleman over there is a doctor. In fact, there are several doctors here. But no matter who a fellow is, we're all on the same level here. A man's importance at the International is based more on the quality of his dogs than on who he is back home!"

This year, 404 Futurities and 235 Derbies ran for the top trophies and top money. Derbies are actually puppies born anytime during the calendar year preceding the big event. At this year's stakes, for example, all derbies were born in 1958. To run in the International, these puppies must have already proved themselves. They represent the cream of the crop—the winners from 37 associations in the United States. The 235 derbies which ran this year were the survivors of eliminations involving close to 10,000 beagle pups over the country.

Futurities are dogs which were nominated by their owners for this event at the time they were whelped.

Before the running begins, all dogs are measured and divided into 13 inch and 15 inch classes. This, of course, is the height of the dogs at the shoulders. Then they may be further divided into dog and bitch classes for running in braces of two. Braces are made up by a drawing. This is simply a matter of putting the names of all dogs, in a certain size and sex class, into a hat and drawing these names two at a time. This way there is no prejudice involved in pairing the dogs for their tests.

When all is ready, the two judges on horseback, the handlers leading their charges, the field marshal who keeps law and order and the gallery all move off to the running grounds. Once there the gallery spreads out in a line and starts through the cover.

MEASURING EACH DOG is an important and interesting part of any beagle trial. The 13-inch Futurity classes were measured at the Imperial kennels on Sunday, April 19 and next morning 93 little dogs were started at the Chartiers Valley under judges Carl Wolcutt and Bubba Estes.





GALLERY, JUDGES AND HANDLERS start with the dogs towards the running grounds. As soon as a cottontail is started, those who see it shout "Tally-ho" and the dogs are quickly on their way.

As soon as a cottontail is started, those who see it shout "Tally-ho." The two handlers who are scheduled to start, quickly take their dogs to the spot and at the command of the judges turn them loose. Off they go, barking and bawling on the track. The gallery stays put but the judges and handlers follow the chase.

Now comes the difficult task for the men on horseback. What makes one dog better than the other? What

are the fine points of distinction which permits them to make a champion of one and an "also-ran" out of another? To the novice this appears to be an almost impossible responsibility. But the judges are experienced men, who have owned and trained beagles for years, who have seen thousands of chases and who know rabbit hounds inside and out. They speak in terms of level-headedness, drifting at the checks, overrun-

**FIFTEEN INCH** bitch winners in the International. The winners are positioned as placed with the first place dog at left—Ruth Lamb with Sharpe's Bobbie; Bill Werner with Bill's Becky; LeRoy Davis with Lonoke Liz; Mike Wagner with Deer Park Brighteyes; Earl Gardner with Phil's Bonnie Belle. Standing are judges Ez Haines and Ben Harding with marshal Bob Appel.







**NATION'S BEST BEAGLES** were entered in the International which had 639 beagles selected from thousands of the country's best. This event, held each spring, is the "world series" of beagledom.

ning, too mouthy, too conservative, smooth, steady, jerky, and other items which mean lost points or points gained on the scorecards.

When the judges are satisfied that they have seen enough to make a fair decision, the handlers are instructed to "pick-up" their dogs and all return to the gallery.

At a signal from the field marshal, the gallery starts out again, someone cries "Tally-ho" and another brace is put down. This procedure is continued until all dogs have had a chance to show their training and their breeding.

The question may come to the reader's mind as to why the International is held in Pennsylvania each year. There is a good explanation. First of all, Pennsylvania leads all other states in the number of beagle clubs with 87, 60 of which are licensed. Then the three host clubs west of Pittsburgh—Imperial, Coraopolis and Chartiers Valley—have kennel space to house 1500 dogs.

But most important, these three clubs own large areas of top quality running grounds with plenty of rabbits. The rabbits aren't there just by chance either. They were produced, and are kept there in good numbers

through scientific management and hard work. The members have learned that cottontails are the products of proper habitat—plenty of thick cover near good natural food.

By planting food and cover and by creating brush piles and treetop tangles, these clubs have assured the International officials that there will be plenty of rabbits for as many braces as they may need to run. Then, too, each has a substantial clubhouse in which those who attend may eat and visit and where the trial officials may conduct their business.

Whether it be the International or just a club trial at home, beagling is a sport which can be enjoyed by the whole family the year around. The younger members of the family like the dogs, the wife enjoys the social aspects of the club, and they all like to watch their "Butch" run. Of course, Dad and the boys get an additional bonus come hunting season, for these field trial winners are also tops in hunting, too.

All one has to do is listen to the "music of the hounds" on a frosty morning in November, or watch an eager gallery follow a brace during a trial, to understand why beagling has truly become an All-American sport.

# Marsh Bait

By Robert E. McGill

**T**HE bleak waters of the big marsh were as sullen as the late November sky. A chilling wind was blowing and the Geneva swamp was a desolate spot except for one thing—wings were whistling as the ducks came riding in on the wind, headed for the acres of waterfowl refuge under the hill off to the east.

From the north and west came the blacks and mallards who had spent the day feeding in the upper reaches of the marsh toward Conneaut Lake, even out to the Pymatuning. The pattern was the same for every pair or flock. They came scurrying down

The cooperative Game Commission-Pennsylvania Department of Highways waterfowl project completed a few years ago near Geneva, Crawford County has proved a real boon to sportsmen and waterfowl alike. With the Commission's duck-rearing farm along its edge and ideal conditions over some 500 acres of flooded marshland, it attracts nesting ducks and geese as well as thousands of migratory waterfowl.

This is a true story of an exciting hunt and a near tragedy by a former Meadville newspaper man, now a Youngstown, Ohio reporter.

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over the swollen channel, then veered to the east pointed toward the refuge.

It was simple. All the hunter had to do was find a dry hummock or little patch of waist-high brush in the





flat behind which he could hide. Today, though, there were only a few good cover spots because the water level had been rising steadily for two days. The marsh stretched out on both sides of the channel for nearly a mile, bordered on each side by paralleling railroad grades that ran for miles. It didn't take much extra water to change the picture in these flatlands.

As I stood on the railroad grade I could spot the half-dozen duck hunters already in business. The best spot, a clump of willows on a point of the channel a quarter-mile downstream, was busy. Every few minutes hunters there were getting shooting straight overhead as the ducks turned off the channel and made for the refuge.

Two brush clumps just beyond the railroad grade, little islands surrounded by high water now, were

getting fewer shots but the ducks were lower when they sped over. To my right another hunter was hunkered behind a handful of cattails, icy water halfway up to his boot knees.

The railroad grade curved across the channel in this lower end of the marsh and was always avoided as a homecoming passage by the ducks.

After a fruitless afternoon hunting ringnecks in another area I was itching to go at the sight of the ducks. It was darkening fast and there was only about 45 minutes of shooting time left. Time enough to bag a couple of birds if I could find a good spot in a hurry. I pulled up my hip boots, pushed three shells into the choke-bored pump and walked down to the place where ankle-deep water flooded what two days before had been a high, dry spot.



That water was cold. In these flats off the channel it was quiet water and an icy scum was forming soft, floating ice cakes. Making sure the hunters in the two brush clumps to my left and the lone man on my right saw me, I moved toward the spot I'd chosen. The three or four straggling willow trees out along the channel edge were on a little bank. Beside them I'd have a little cover and my feet on dry ground. And I'd be right in the center of the wide stretch the incoming ducks were using for a trailway.

Inside of two dozen steps the water was up to my knees. The trees I was aiming at were perhaps 150 yards away, but I knew the lay of the land. I'd often hunted there when the ground between the railroad grade and the channel was entirely out of water.

I was following a slight ridge, now under water, walking slowly through the knee-deep water and scanning the skies when a dozen ducks roared down the channel ahead. Abruptly they wheeled to the left and were right on top of me. I tried to crouch closer to the cold water so they wouldn't flare off but they saw me in time and veered to the right. The lone gunner got one as they hurried over his post to the refuge behind us.

Stepping up my pace, I slopped half a cup of ice water down one boot. Wow, but that was cold. More ducks were coming in. Two small bunches went down and turned over the hidden hunters at the point below. Boom, boom, boom. Then another boom and two birds were down.

Next a single left the channel and came skudding at me. Again I tried to crouch. The barrel came up and moved ahead of the speeder and there was the thump of a 12-gauge magnum charge against my shoulder, but the loner kept going. A shot from the brush clumps behind me folded him up.

I hurried, muttering to myself as

more ducks poured down the channel, then swung across the flats. It must have taken 30 minutes to reach the spot I wanted by the willows. By the time I made it I had acquired more water in both boots for the slight ridge I followed was covered with ice water that came within an inch of my boot tops out here.

My feet were numb but I stamped them on the dry ground and raised the pump to ready. Here they came, a big bunch hurrying along under the darkening sky. This flock failed to turn off but came on by me, going below by the point to wheel. More shooting for the point. If I fired at down-channel ducks, they'd drop in the deep, swift channel and couldn't be retrieved.

Four more appeared, coming straight as arrows following a course, then suddenly tipped their wings and turned over the flats toward the refuge. I got in two shots, missing both. Not enough lead—as usual.

Several other groups winged straight down the channel before six decided to turn above my hideout. I caught one just as he changed course, missed a second shot.

Before I finished reloading a big flock that had been well strung out split, some of them going overhead down the channel but a half dozen turning down my alley. I fired and dropped the first one, swung on a late follower and pulled the trigger on an empty gun. Blast it!

Both my downed ducks were within sight and neither moved. Pick 'em up on the way back in a few minutes.

I reloaded in time to get another black duck from a foursome. As I lowered the hot pumpgun I suddenly realized the three remaining birds had drawn no shots from the hunters I'd passed coming out to the channel. Looking over toward the railroad grade I saw a knot of men standing against the skyline, guns down and watching the almost constant stream of inbound ducks over the wide flats.



Even in the dusk I could see sizable bundles of birds slung over shoulders.

Time to go. My watch showed the shooting deadline only a minute off. By the time I retrieved my three ducks and got back to dry land it would be darn near dark.

When I shouldered my gun and started to move back into the water I found my feet almost completely numb from the water I'd shipped in my boots coming out. Well, I could hurry things by picking up my three dead ducks and cutting across the flooded flat instead of doubling back to follow the little underwater ridge. Little more water wouldn't make much difference since my feet were as cold as they could get.

I sloshed out toward the nearest bird which had fallen less than 25 yards above my willow hideout. Oops, water's deeper here. Both boots about knee full now.

Speed seemed to be the answer as the lonely marshland got darker and my legs got colder. As I retrieved the second duck and started wading over to the third my numbed feet failed to signal a grass clump under the water and I suddenly pitched forward onto my knees, chest deep in the frigid water.

My whole body gasped with shock and I lunged upright with fear blinking a big red light in my mind.

I stood stock still for an agonizing minute, two nice ducks clutched forgotten in one hand and a shotgun piped with running water in the other.

My body was shaking with cold and I'd added 50 pounds to my burden with sodden clothing, full boots and hunting coat pockets filled with water. Overhead ducks were still skidding in but it was too dark to see; I could only hear the whistling wings. Faintly I could make out the high railroad grade, still distant and separated from me by a dark stretch of flood water.

With fear pressing itself into my

mind I took a bearing on the shortest distance to dry land along the railroad grade. No need to go slow now, feeling along for the highest land underfoot. Best get to shore, and quick.

Then the little bit of calmness I had kept from panic was washed out as I started to step forward. My leg, half-frozen from the icy water in the boot, wouldn't move! The chilled muscles couldn't lift the leg high enough to clear the tangled, grassy bottom and step forward.

Now I was scared. All over. I could only look ahead into the dusk at the railroad grade and wish I was there. Shivering with cold and fright I scanned the big marshland. Water everywhere and awesome silence except for the far-off gabbling of resting ducks in the refuge. Their noises sounded like low-pitched laughter.

Everyone else had left the marsh



30 minutes ago. Wait a minute, maybe some were still up at the cars some distance beyond the railroad grade. The three fast shots I fired from the cold, wet shotgun echoed over the still flats. If only George Kepler, the game protector, was in the area he'd come hot-footing down to catch this after-hour gunner.

Miserably cold and scared I remained rooted to the spot, futilely listening for help. There was no sound after the echoes faded, only faint talk by the distant ducks. Ducks, hah. The two blacks I had picked up had dropped from my icy hand when I fell and floated away forgotten.

Summoning reserve nerve and strength from somewhere in my chilled body I stuck the pumpgun under one arm and grasped a boot top in either hand. Laboriously I tried to lift my numb left leg, pulling up on the boot at the same time. It worked. The half-step forward wasn't much but it was a move. I tried the same maneuver with my right leg. Another lurch forward.

Without hesitation I kept on. I could do about six short steps with each leg before my arms tired out and numb legs refused to even try to help and became dead weight. Those boots, full of icy water, weighed tons.

Stop and start. Again. And again and again. Slowly I was nearing the railroad grade. What little light there was now came off the water. The high ground in front of me was merely a blob of darkness.

Utterly exhausted I slowly stumbled on. When I stopped for a moment's rest I could only think of my plight. If I fell again I probably wouldn't make it back up out of that black ice water. God knows, they'd never find the body in that marsh until next spring—if then.

More steps. Getting close now. I tried counting my labored pull-steps but found I couldn't concentrate on anything but each single task: pull

up and step, pull and step.

At last the water dropped below my boot tops, then down to my knees. I couldn't see the low, dry land ahead but it must be there. Then my tired arm failed and once more I splashed into the inky, icy water, landing on my hands, gun in the mud and water up to my waist. The shock wasn't as bad as the first time but as I tried to get up I realized how completely numbed and exhausted I was. Somehow I used the gun as a support and hauled myself upright.

Can't quit now. Just a little way to go. Pull-step, pull-step. When the water got ankle deep I floundered down again. This time I just kept crawling. And it wasn't far. A few shuffles and my hands touched frozen grass and dry land.

I stretched out on the cold ground, thankful beyond all measure. It was some minutes before I rolled over on my back and pulled my booted legs up so the cold water poured out, lightening my burden and freeing my legs from their ice-like casing.

Aware of my shaking, chilled body, I somehow got up and like an old, old man struggled up the railroad grade, down the other side and on out to the road and my waiting car. I peeled my boots down, shucked off the water-logged hunting coat and tumbled in, immediately turning on the motor and the heater. Even its first-cold blast felt warm. It was a while before my legs warmed up enough to function safely on the clutch and brake.

As I told my young wife the story later that night, she shook her head and uttered one word, "Idiot."

I've kept the promise I made myself that dark, awesome evening nearly 10 years ago: I never go duck hunting alone.

And although I stand beside a companion, I still feel a twinge of fear when I look out over a darkening winter marshland—even if the ducks are coming in.





RIVER BOTTOMS with nearby wooded shelves are often good woodcock bets. This backwater from the Shenango River just south of Pulaski never fails to come up with a bird or two.

# Timberdoodling

By N. R. Casillo

**M**Y father was a thoroughly consecrated woodcock enthusiast. How he came by it I'll never know. It couldn't have been an ancestral trait since it is clearly recorded that the most notorious of our ancestors escaped the long limb of the law by stowing away in a Spanish sailing vessel bound for the land of the free.

To dad the timberdoodle was the bird par excellence and when prepared for the table it was done to a turn in the approved epicurean manner, the intestines or "trails" being always cooked with it. Indeed, he held as many others did, that the woodcock derived its nourishment by sucking up the "essence" of the soil with its long bill. "There is nothing in the trails but the most zestful of juices," he would explain to wide-eyed diners as he deftly extracted the highly esteemed delicacy from the

innards of a well browned doodle. However, I don't recall any of the guests ever doing likewise. Instead, they ate around what looked like a snarled mass of twine. Dad would frown at the squeamish procedure of his guests and snort, "Huh, and you eat raw oysters."

To be sure, solid matter was rarely found in the birds' intestines. Oh, occasionally in the pouch attached to the intestines there would be a trace of a black humus-like substance which dad explained helped in the chemistry of digestion—the woodcock's. The truth of the matter is that after its nocturnal or crepuscular meal the woodcock's prodigiously rapid digestion soon erases all trace of the earthworms comprising the bulk of its food, i.e., everything but that bit of indigestible matter remaining from the intestines of its late meal.

Despite the fact that most of my woodcock hunting has been confined largely to alder thickets, birch and popple covered hillsides, fields of standing corn and even dry stands of small timber, I am still partial to boggy lowlands through which may meander a stream with muddy margins bordered with lush grass banks leveling off into flatland generously pocked with swales rimmed with stunted willows and a maple or two. That, to me, is the traditional home of the timberdoodle. This preference probably harkens back to my boyhood days when the season if there was one (and there was), came in earlier than it does now. And in the summer and early fall that is exactly where most of them are found.

Unlike dad few hunters expressly plan a hunt solely for woodcock. Usually the birds are bagged by upland game hunters who chance upon a number of them resting on a thinly wooded hillside or in the alder and other thickets at the edge of grouse territory. As a rule, such long remembered experiences often account for more woodcock than do trips where he is the designated quarry. To this I am sure most hunters will subscribe.

A woodcock hunt in which I recently participated had all of the ingredients which make such a foray so memorable. The hunting area was chiefly boggy ground over which were scattered clumps of the inevitable alders although there were also quantities of small maples and other water loving species. It was the ancestral early season stamping ground of this "bird of mystery."

There were two dogs, both setters, the veteran Boggle and his slightly erratic but highly imitative son Doggle. No scent of rabbit or quail, pheasant or wood tortoise could deter Boggle's attention when his nostrils were assailed by whatever odor the doodle may be characterized.

Our bag was small, but does that matter when one has the chance to watch topnotch canine performance in the accepted bailiwick of the timberdoodle? In fact, we couldn't have had more fun even if most of the birds had not left a day or two before our hunt. However, that is one of the vagaries of the woodcock: "Here today, gone tomorrow." Yet, the few birds which remain behind or those which may filter in during the night are enough to furnish sterling sport.

It is agreed by those who know that the woodcock is a game bird supreme. It lies close to the dog, levels its flight just above the surrounding growths to offer a quick but frequently not too difficult shot. If the gunner misses, the bird drops down almost immediately into another hiding place. There is almost continuous action especially if the gunner is presented with difficult shots. On a couple of occasions I've heard Seth Gordon declare that the grouse hunter like the dry fly fisherman, is tops in his sport. However, I'd like to qualify that statement by saying that when the trout are not taking the dry fly I'll settle for woodcock. The pity is that there are not more of them.

Many a word has been both written and spoken about the tasteful beauty of a woodcock's coloring. It is so much like the autumnal colors among which it lives; pale cinnamon mottled more or less intermixed with gray, the general tawny tones making the bird scarcely distinguishable among the harmonizing colors of fallen leaves. It is truly a bird of the autumn uplands.

Paradoxically, this bog loving bird takes to areas which are seemingly so unlike its summer and early fall haunts. Yet, it is not so strange for upon the sides of many of the mountains there are isolated wet spots of considerable extent. These areas occur at exactly where one would



naturally expect to find a parched forest floor. About them one is apt to find considerable leafy cover and doodles. "That is, if they haven't forsaken the country," glumly added my companion. However, after lunch we sought such a place.

The hills running parallel to the road between Marienville and Kelletville in our most sparsely populated county are made up of a series of benches. One such bench several hundred yards below the Salmon Creek bridge and a hundred or so feet above the creek itself was our choice. If the margins of such a place seem hard and unpromising don't let it throw you. The chances are that at its lowest level you are likely to find a considerable patch of damp if not wet surface.

Near one end of the high level bog we found what we were after. No, not birds, but a promising expanse of some four or five acres. Here and there clumps of alders and stunted willows punctuated the meandering course of an all but dry stream. There were borings and chalkings everywhere, but, of course, we knew the birds wouldn't be there. The dogs found them in the cool shade of the mixed thicket of young trees and bushes rimming the bog.

We hastened to the spot where both dogs were doing their stuff. Boggle stretched out in his usual grand style while Doggle had solidified into a clumsy crouch, his head half turned as though he had encountered a vagrant whiff while going away.

George knew what had happened. "They've both got birds."

The obvious strategy was to walk in on them until one flushed. The shot would more than likely trigger the other. I walked in on Doggle's bird, George keeping abreast as he signaled Boggle to go in. Boggle held staunch and George went on ahead.

My bird broke first, skating erratically to the treetops where I nailed



WHEN MAPLES FLAME is a happy time to hunt hillside benches with their bogs and ponds and meandering streams.

him. The report triggered a kind of a chain reaction with three birds going up one after the other. Two shots and one bird dropped. "Well, we can't kick about that," grinned George as he rewarded Boggle with a bit of confection. Suddenly he looked about. "Hey, where's Doggle?"

We looked about bewilderedly, but only for a moment. We both spotted him at once. Partly hidden by intervening bushes he was on a quivering point, not knowing whether to charge or hang on. "Easy, boy," George encouraged.

Doggle responded with a comical sidelong glance and a single shake

of his tail. Even the most uninitiated could readily understand his, "How'm I doing, boss?"

After the boss did the honors, Doggle came in with the bird and for his bit of candy. "Good boy, Doggle."

While we paused for a smoke I asked, "Why did you give these dogs such confusing names?"

"Haven't I ever explained?" However, without waiting for an answer he continued: "Well, when Boggle was Doggle's age he boggled as many a deal as has Doggle. Strange, though, when Boggle steadied down he did it for keeps. I expect Doggle to do likewise. Also, Boggle dotes on bogs, so what could be more appropriate than Boggle?"

"And Doggle?"

"There can be but one Boggle, so what could be more logical than Doggle?"

Boggle and Doggle confusing? Per-

AFTER LEAVES FALL woodcock seem to be more partial to lowland marshlands. Probings and chalkings cover much of the hammocky ground.



haps. But the confusion cannot hold a candle to the mysterious doings of doodles during their waking hours. We know about their arrival in the spring and their departure from summer haunts in the fall. Then, the outlandish courtship antics of the male are familiar to many observers. Food, of course, consists almost entirely of angleworms. Oh, we must not forget that a cold snap in the fall will send them fluttering on their way, yet, contrary to their apparent aversion to a cold snap they practically dog the frigid footsteps of old man winter on their northern peregrinations.

Spring arrival dates here in western Pennsylvania range from March 5 to the 23rd. One unauthenticated date is given as February 12, but it is suspected that the bird had wintered in the vicinity. This they can do if the winter is mild and/or if they are handy to an unfrozen stream. It is then that they depart from their earthworm diet to readily devour larvae, grubs and whatever worm species are available.

The woodcock is most cosmopolitan in its choice of nesting sites. The selection may range from damp bosky places to far up in the hills on dry ground. This wide range is not so unusual when one considers that the woodcock is really an aberrant shorebird. Long ago its ancestors must have abandoned their original habitat and taken to the wooded uplands. Naturally, many of them revert back to type and select ancestral sites with the resulting wide range between the two extremes.

Two springs ago a woodcock selected for its nesting site the base of a maple exactly four feet from the edge of the sidewalk on one of our most heavily traveled residential streets. A few days after its discovery many neighborhood children took to regularly visiting the spot. On my first visit I shared by observations with four youngsters whose ages





**DOGGLE HONORS BOGGLE** on point. Backing here, he turned out to be one of the best woodcock dogs in the author's part of the country.

ranged from five to not more than eight. The courageous female held as steady as the proverbial rock even

when the oldest child demonstrated the apparent "tameness" of the bird by touching its bill.

Upon my return a few days later, I was greeted by a gory mess. All of the half incubated eggs were destroyed. "It was a big black bird," volunteered a justly irate young bird watcher.

"A crow?"

"No, I know a crow. It was a big black bird!"

I suspected a grackle, the sly rascal doubtlessly having been tipped off by the unwonted action about the nest.

You see, I've been able to give only some of the few more or less known facts about this bird of mystery. Well, there is one more item passed on to me by an old timer who is reputed to somewhat color the truth. This one sounded a bit tintured, but it is only by passing on such information that we learn about its validity. Anyway, he claimed that while tending his trapline in a creek bottom he came upon a woodcock with its bill frozen so firmly in the ground in which he had been probing as to make it impossible to release. For fear of hurting the sensitive bill he decided to let the sun do its stuff. An hour later when he passed that way again the bog-sucker was gone.

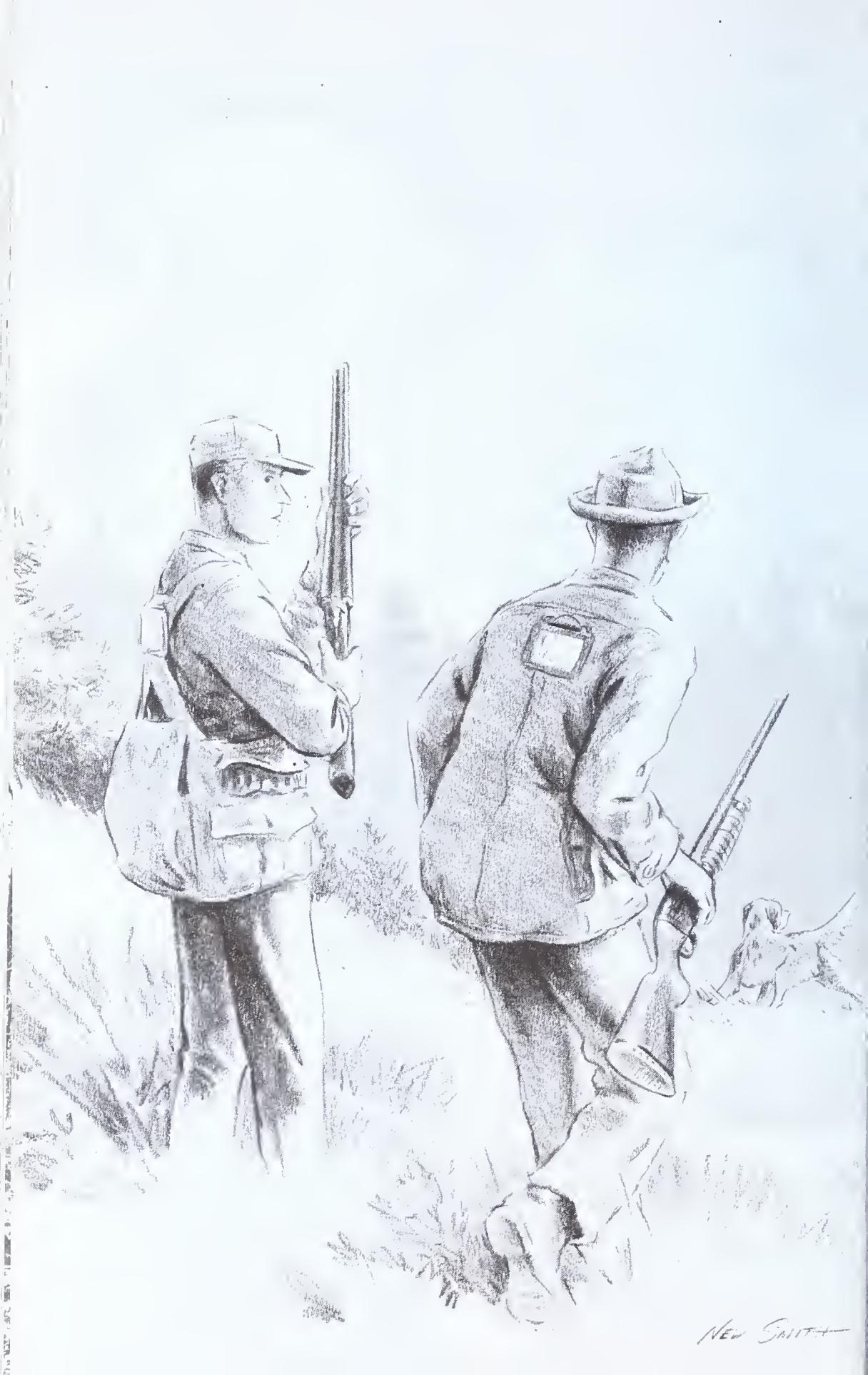
Now, you tell one.

### Have Your Hunting License Yet?

The 1958 Pennsylvania hunting license expires Monday, August 31. Beginning September 1 a 1959 hunting license must be owned and properly worn in the lawful hunting or trapping of any wild bird or animal found in the Commonwealth.

Waterfowl hunters must own and wear a 1959 Pennsylvania hunting license and possess a federal migratory bird stamp to hunt ducks, geese, brant and coots in the Commonwealth. The "duck stamp" may be purchased at post offices.

Bow and arrow hunters are reminded they must first obtain a 1959 hunting license before being issued an archery license to hunt in the exclusive October bow and arrow season for deer. Archery license applications will soon be available from issuing agents. A license for the bowmen's separate deer season in October costs \$2.15 when purchased from a county treasurer's office. Obtained from the Department of Revenue, Harrisburg, the cost is \$2.00.





# The Unmodified Bore

By George Bird Evans

## PART TWO

**I**F YOU have further urge to study the unmodified bore, get yourself a hunting dog—and wait.

A stranger will arrive at your place, introduce himself, and say that he, too, owns a hunting dog of the same breed that you do and that he has come to see yours.

I am always, naively, delighted. A fine common interest. I ask him to tell me about his dog. He does—for the next hour. I have a simple desire to mention something about my own but there seems no way to stop him. The best method is to inquire about his dog's bloodlines. He seldom knows but he tells you it has a pedigree—this long. (It appears to amaze people that dogs have pedigrees.) Or it may be that his dog isn't eligible for registration. It's a special cross—some friend's setter bitch got loose in heat—and he thinks this strain has wonderful possibilities. He hopes to establish it and name it for himself. I agree politely that it would be fitting.

At this pause two or three gorgeous belton creatures that I have come to regard as close to the major achievement of my life come trotting up to us, heads and tails high, and I say—modestly, I hope—that here are some of our setters. My visitor eyes them as if they were flea bait and nods. "Now this Bill dog of mine . . ." Yak, yak into eternity.

It is confusing, how many men own the best shooting dog in the world.

I think I've heard nearly every variation on this theme. One man told me of a bitch he owned who, on point, would estimate the possible flight available to the birds and if

the situation was unfavorable would back off and come in on her point so the flush would be through an opening offering her master a better shot.

The disturbing part was that when I repeated the story to another man, he informed me he had a dog who did that regularly. Perhaps I'm missing something, shooting over just ordinary dog work.

What these people probably have are dogs who shift position to pin running birds, or even one type of blinker who, instead of showing uneasiness by ignoring the point, merely moves off and comes back in from another angle. I can be certain of one thing—you can't tell a dog story that won't be topped, usually by one about your listener's own dog. A game-bird's-eye view of these men afield with their "best shooting dog in the world" might be enlightening.

A companion can ruin your shooting day without putting a single pellet into your skin. There was the man who took me (in my car and with my dog) to a good grouse covert he knew. You may say, "What greater love . . ." and I agree—if he hadn't spent the day racing me to every point. I like the pleasure of offering my companion the shot when my dog is pointing. My acquaintance gave me no chance to defer to him on the first or any other point. He was simply there, banging away, long before I arrived. Running full-tilt at a pointing dog has been recommended to further steady down an already stanch individual (if I were the dog I wouldn't like it) but it can ruin a raw pup. The fact that my chum might have hit at least one bird with the fifteen shells he fired had he not

been completely winded after his sprints could have altered his behavior the next time. P.S.: There was no next time.

I had an experience the reverse of this. A high-strung Virginian invited me to his family's place for some quail shooting. He entertained me delightfully, took me into beautiful bird country, and provided a brace of well-seasoned setters, insisting on my walking up to more than my share of the points. He then reduced me to a nervous shambles by cautioning me each time I approached the quivering dogs: "Careful now—watch it—they're goin' to flush any minute! Try to get a double!" They did, and I didn't.

Another chap who could improve his manners is the one who assumes the responsibility of telling you what the pointing breeds are supposed to do. He may be a rank amateur with his first dog but he has learned the jargon and though you possibly have

lived with setters or pointers for forty years, meeting you, he starts from the ground up. He forgets that conversation is a two-way means of communication. Wedged between this menace and a heavy piece of furniture, you listen while your face muscles set in what you try to make a smile as he takes off on another cast, tail high, and recites his ABC's of dogdom.

One of the most pleasant experiences in developing our Old Hemlock setters is raising puppies. We do not do it professionally but with each new step in our breeding program we have puppies for sale. One thing detracts—the time comes for most of them to leave. We try to place each with the right person but, even so, a little bit of us goes with him. Our second litter has been advertised and we faced the miserable business of parting with them. Late one Sunday afternoon a car drove in our lane and a huge bear of a man heaved out, shot a stream of tobacco juice across the driveway, and told me he had come to look over our pups.

I turned to lead the way to the puppy pen but half an hour later was still standing in the same spot hearing how, among other things, to shoot a grouse. One phrase stays with me: "Let me get you told." I got told how to handle dogs, how to kill three quail with every covey flush (with two shells, of course).

At last he paused and said, "Now what about these pups?"

I got him to the kennel and began to show him this little blue female and that nice—but he wasn't listening. This time I heard about his dogs, how they retrieved the astronomical number of birds he shot. I was assured he wouldn't string me (he used another word) and I ended up getting told that, of his two present dogs, he intended to keep only one.

"I'll only keep the best. The other one will have to go." With a curved finger he hooked the spent wad of tobacco out of his jowl. "And let me







get you told—" the same thick finger stabbed my chest and I can hear that bull voice still—"I'll not sell a dog that isn't good enough for me. I'll shoot him."

His wife, sitting quietly in the car, looked tired. I informed him that none of our puppies were available.

Along with the wide-open bore who talks solely about his own dogs I rate the overgrown juvenile who brags about the amount of game he kills. This mental eight ball may be a good shot, fitted with a fine gun, or he may be the local buck who boasts that he "knocked down five grouse as they went up one at a time out of a laurel bush," using a shotgun with the choke sawed off. There's one in every community.

Most candidates for the list of bores are only people being people. Like the casual acquaintance I took shooting over my dogs to one of my pet coverts. Next time I went back I found his car parked and the crack of gunfire in each direction I tried to hunt. I gave up, and when I saw him weeks later I asked if he had found many birds the day I saw his car. He studied, trying to decide

which day, and said he hadn't done well but "the rest of the crowd got into birds and killed quite a few." The place has been overpopulated ever since, but not with grouse.

It isn't selfish to try to preserve good shooting. Every sportsman has a responsibility to see that game gets fair treatment. One or two visits a season taking only a bird or two from each covert leaves a margin for the next man if he is decent enough to do just that. Cleaning out a covert "because the other guy would do the same" only places you on his level, and is taking the grudge out on the game. Gunning a territory down to the bone results in poor sport for everyone, and that's what happens if the person you take along is one of those who has to spread the word.

The measure of a sportsman is best gauged in relation of man to game, not man to man. The chap who gives his game the breaks when he is alone in the woods with his dog (and there is no better companionship) is higher on my scale than the fellow who behaves only out of fear of the law.

A few contenders for the title of

bore are merely thoughtless.

1) The companion who controls his dog by voice, instead of by whistle or gesture, putting up most of the birds beyond gun range. The human voice not only makes game jumpy but confuses the dogs.

2) The friend who has killed birds over some pretty nice points by your dog and later passes remarks about your dog being too wide, or too close, depending upon how he happens to view things.

3) The other friend who sees that the above remarks get back to you.

4) The companion, also sharing your dogs, who gets morose when they aren't finding birds.

5) The companion (and anyone else) who strews his lunch papers around the woods and walks off with the air of a man who has left a worthy mark of himself upon the world (I'm not sure he hasn't). Bury them under a log or a rock. I leave lots of empty shells and occasionally some feathers but I take pride that, unless there are my tracks in snow or mud, the woods looks the same after I pass through as when I enter—no gum foil, no lunch papers. AND no smouldering cigarette butts.

I have a special niche for one last kind of bore, and I say this with feeling as owner of a place that I value as territory to train my setters. If a bore is a person with no regard for the rights of others, certainly the man who trespasses on private property is a bore. The sooner the shooting man gets over the notion the landowner *owes* him recreational privileges, the sooner that landowner may extend those privileges to him—but as a hospitable gesture and not as something the landowner owes the public.

Much has been said about sportsman-farmer relation that is fine where it applies. But a lot of shooting land is the property of a man who wants a place to hunt (like the very people who cry loudest about closed shoot-

ing), has saved his money—it doesn't take too much—and purchased land (just as they could do), pays the taxes each year, plants wildlife food and cover so he and his friends may have shooting without encountering the kind of greedy boorishness that makes posting necessary. I think if you owned it you would feel you had the right to say who hunted on it, just as you have the right to say who sits at your table at dinner. Posting is the only way you can control this and offers no justification for some low-life to tear or shoot those notices down, or ignore them.

I have rarely refused anyone who has had the courtesy to come to the house and ask permission to hunt. That way I can make it clear what kind of game I do not want killed and what areas I am willing to permit hunting on. This seems not too much to expect of total strangers who want to use my place. The kind who help themselves, sometimes undertaking to tell me, when caught, that my notices aren't close enough together, or—as armed intruders on private property—even get arrogant when asked to leave deserve the treatment they usually get.

As an ardent gunner I am faced with the same problem of finding shooting, but I can't see how anyone would want to go where he isn't welcome. Asking permission, I am seldom turned away. To sneak on is an admission that you are not fit to be invited by the owner of the land. If refused permission, any sportsman should be man enough to understand and bow out decently.

Being a decent sportsman—the opposite of a bore—is, I think, a matter of respecting the other fellow whether he is beside you or a stranger you will never meet. Above all it means respecting the game you hunt. It is possible to be a sportsman *and* a gentleman. Perhaps you have the pleasure of knowing this kind of sportsman, but are you having the pleasure of being one, yourself?



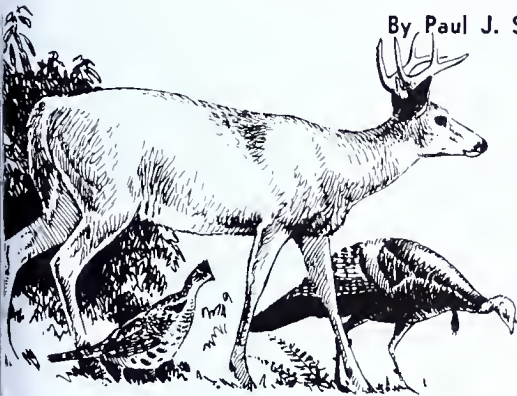


PENNSYLVANIA GAME COMMISSION

# Financial Report for the Fiscal Year

JUNE 1, 1958 TO MAY 31, 1959

By Paul J. Sauer, Comptroller



**E**VERY sportsman should be interested in the financial operations of the Game Commission. In order to bring the facts to you, in as simplified a manner as possible, we present this report.

The Game Commission is a self-sustaining organization. Its revenue is derived from license sales, fines, sales of wood and coal products, royalties, Federal Contributions and other miscellaneous revenues. A complete listing will be found in Schedule No. IV.

By far the greatest source of income is the sale of resident hunters' licenses, contributing more than half of the annual revenue. Thus the Game Commission's financial operations are separate from those of other Departments of the State Government, most of which are supported by the General Fund.

In line with generally accepted governmental accounting practices, this report includes a detailed statement of revenues and expenditures

(Schedule No. IV), a statement of the present financial position (Schedule No. I), a statement of expenditures for each major program of the Commission (Schedule No. III) and other supporting data, graphs and charts.

A review of Schedule No. IV is the first segment for your consideration. The Net Balance as of June 1, 1958 shows that \$4,981,623.20 was available for expenditure. Revenue from all sources during the year amounted to \$5,465,628.76 which, when added to the beginning Net Balance, made a total of \$10,447,251.96. Actual expenditures by the Commission and other State Departments amounted to \$5,274,839.44 which left a balance of \$5,328,362.56 in the Game Fund as of May 31, 1959. This balance does not represent a surplus or—excess funds in any respect because it is subject to normal operating liabilities incurred by the Commission during the course of the fiscal year.

The financial position of the Game Commission (Schedule No. I) was

prepared in order to illustrate these liabilities. The sum of \$155,950.04 must be reserved for the vouchers remaining unpaid as of May 31, 1959. The sum of \$1,422,181.06 must be reserved for encumbrances which represent orders for the purchase of feed, materials and supplies, equipment, land purchase agreements, real estate rentals and other contracts. The Department of Revenue is responsible for the printing and issuance of hunting licenses and \$69,188.62 was reserved for encumbrances of the Department of Revenue for that purpose. The reserve for a continuing appropriation to the Treasury Department in the amount of \$750.00 is the unexpended balance of the appropriation made to that Department for the replacement of escheated checks. The sum of \$1,250,000.00 was set aside for Working Capital. During the period from February to September of each year the expenditures far exceed the income, therefore this reserve is necessary in order to carry out the Commission's programs.

The remaining Net Balance of \$2,430,292.84 is to be used for the construction of four field division headquarters buildings, which were previously delayed because of the many engineering and planning problems involved. The proposed construction of a dam is another undertaking planned for the very near future. Also, a reserve must be maintained for the mandated requirements of the earmarked funds under the provisions of the Game Law, as

amended by Acts 271 and 632.

The net balance of \$2,430,292.84 plus the estimated revenue for the fiscal year June 1, 1959 to May 31, 1960 has been budgeted to carry out the above mentioned Capital Outlay Program and also the accelerated program of the Game Commission during the 1959-60 fiscal year.

Where the money is obtained and how it is spent is the next phase for your consideration. Two charts have been prepared showing the sources of income and functions for which it was expended. The supporting schedules for these charts are the Revenue section of Schedule No. IV and the Summarized Functional Expenditures, Schedule No. III.

### Statewide Field Operations

The Division of Land Management spent \$467,278.86 over and above the \$1,784,249.54 spent in the 1957-58 fiscal year. The major portion of these expenditures were for the purchase and improvement of additional game lands in order to provide better hunting and trapping. The Game Commission at this time, owns a total of 935,897 acres of Game Lands. The Division of Propagation through additional expenditures for food and the purchase of pheasants and rabbits from private cooperators, has increased the number of game animals considerably.

### Control and Audit of the Fund

To insure the maintenance of complete, accurate accounts and records and the judicious expenditure of

#### SCHEDULE I

##### CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS OF MAY 31, 1959

Cash .....		\$2,151,496.78
Investment—U.S. Short Term Securities .....		3,176,865.78
Total Cash and Investments .....		\$5,328,362.56
Less: Liabilities and Working Capital .....		
Vouchers Payable—Game Commission .....	\$ 155,950.04	
Encumbrances—Game Commission .....	1,422,181.06	
Encumbrances—Department of Revenue .....	69,188.62	
Reserve for Working Capital .....	1,250,000.00	
Reserve for Continuing Appropriation—Dept. of Treasury .....	750.00	\$2,898,069.72
Net Balance available for Expenditure during Fiscal Year 1959-60 .....		\$2,430,292.84



## SCHEDULE II

## LAW ENFORCEMENT AND OTHER WILDLIFE PROTECTION ACTIVITIES

Game Law Enforcement on a Statewide Basis .....	\$ 677,843.35
Proportionate Share of Field Division's Administration Costs .....	55,678.45
Maintenance of Prisoners Incarcerated for violation of Game Laws .....	1,468.00
General Administration Expenses in connection with Law Enforcement ...	76,804.16
Activities in connection with the control of predators .....	56,638.54
Protecting Farm-Game Projects .....	27,531.91
Bounties paid for predators .....	125,287.68
Two-way Radio System—Installation Costs .....	8,958.25
Total Cost During the Fiscal Year for this Purpose was .....	\$1,030,210.34

## LAND MANAGEMENT

Establishment and Maintenance of State Game Land, Refuges and Propagation Areas .....	\$ 757,607.17
Establishment, Maintenance and Development of Farm-Game Projects ...	204,195.36
Allegheny National Forest: Construction and Maintenance of buildings, clearing, preparing and harvesting food strips and a variety of other important activities in connection therewith .....	26,344.12
All Other Areas: Includes Primary Refuges, State Forests Lands, Auxiliary Refuges, etc. ....	58,121.90
Waterfowl Impoundments and Marsh Developments: Construction costs of waterfowl impoundments, marsh developments and planting waterfowl plants regardless of ownership or location of lands, also includes costs of construction, distributing and erecting duck nesting boxes .....	44,070.28
Winter Feeding of Game in the Wild: Includes the purchase of standing grain and cover on other than Farm-Game Projects, also costs of constructing feeders and the purchase and distribution of grain and salt by the Food and Cover Corps and other approved personnel .....	98,208.17
Howard Nursery: Includes all costs of preparing, fertilizing, seeding, cover cropping, liming, spraying and dusting of nursery plants, also transportation of nursery stock. Purchase or collection of seeds. Costs in connection with packing and shipping of nursery stock. Costs involved in the maintenance of buildings and equipment .....	50,107.46
General Administrative Expense of Land Management .....	95,718.49
Payments to Political Subdivisions in lieu of taxes on State Game Lands	91,879.58
Purchase of Lands including Title and Survey costs .....	421,161.87
Purchase of Equipment (trucks, tractors, graders, etc.) .....	201,147.45
Construction of Buildings .....	39,046.06
Construction of a Dam .....	31,217.36
Pro-rata share of Field Division's Administrative costs .....	122,797.63
Division of Minerals .....	9,905.50
Total Cost During the Fiscal Year for this Purpose was .....	\$2,251,528.40

funds, the Commonwealth has many controls and safeguards in effect. Under the provisions of Article IV, Section 402 of the Commonwealth's Fiscal Code, the Auditor General is required to audit the accounts and affairs of all State Departments, Boards and Commissions at least once each year. The formal audit of the Game Commission for the fiscal year ending May 31, 1959 has not been completed as yet. The accounts are in good order and no problems are expected.

Other controls imposed upon all Departments, Boards and Commissions are:

1. The mandatory requirements that all invoices, payrolls, and other operating expenses shall be audited by the Auditor General and the State Treasury De-

partments before payment is made.

2. The mandatory daily reporting of all financial transactions to the Governor's Bureau of Accounts and Control.
3. The control exercised by the Governor's Budget Secretary over all requests for quarterly budget allotments and all other budget matters.
4. The periodic verification of Accounts with those maintained by the Auditor General's Department, the State Treasury, and the Governor's Bureau of Accounts.

All the above controls and requirements are in addition to the field and internal controls, audits, etc. performed and maintained by the Commission's Accounting Section.

### Earmarked Funds

Under the provisions of the Game Law, as amended by Act 271, Session of 1949, not less than \$1.25 from each Resident Hunter's Licenses fee shall be used for improving and maintaining natural wildlife habitat on land that is available for public hunting; the purchase, maintenance, operation,

rental and storage of equipment used in this work; the purchase, distribution, planting, cultivating and harvesting of game foods; the purchase, trapping and distribution of all species of game, as well as providing protection to the property of Farm-Game Cooperators.

### RECEIPTS AND EXPENDITURES

Act No. 271, 1949

License Year	Resident Licenses Sold	Minimum to be Expended	Expenditures	Expended Fiscal Year Ended May 31, 1959	Over (*) or Under (-) Minimum	Cumulative Over (*) or Under (-)
1949	810,059	\$1,012,573.75	\$1,012,465.96†	1950	\$ 107.79-	\$ 107.79-
1950	801,948	1,002,435.00	1,266,856.18	1951	264,421.18*	264,313.39*
1951	810,349	1,012,946.25	1,095,938.26	1952	83,002.01*	347,315.40*
1952	830,147	1,037,683.75	1,163,287.09	1953	125,603.34*	472,918.74*
1953	859,137	1,073,921.25	1,247,584.35	1954	173,663.10*	646,581.84*
1954	868,577	1,085,721.25	1,215,545.03	1955	129,823.78*	776,405.62*
1955	897,776	1,122,220.00	1,150,865.08	1956	28,645.08*	805,050.70*
1956	901,775	1,127,218.75	1,280,927.58	1957	153,708.83*	958,759.53*
1957	929,165	1,161,456.25	1,312,154.02	1958	150,697.77*	1,109,457.30*
1958	941,176‡	1,176,470.00	1,261,098.24	1959	84,628.24*	1,194,085.54*

† Expenditures from September 1, 1949 (effective date of Act) to May 31, 1950.

‡ Estimated License Sales.

### RECEIPTS AND EXPENDITURES

Act No. 632, 1955

License Year	Antlerless Deer Licenses Sold	Minimum to be Expended	Expenditures	Expended Fiscal Year Ended May 31, 1959	Over (*) or Under (-) Minimum	Cumulative Over (*) or Under (-)
1957	334,683	\$ 334,683.00	\$ 104,218.85	1958	\$230,464.15-	\$ 230,464.15-
1958	349,233	349,238.00	306,605.18	1959	42,632.82-	273,096.97-

### SCHEDULE NO. IIII

#### SUMMARIZED FUNCTIONAL EXPENDITURES

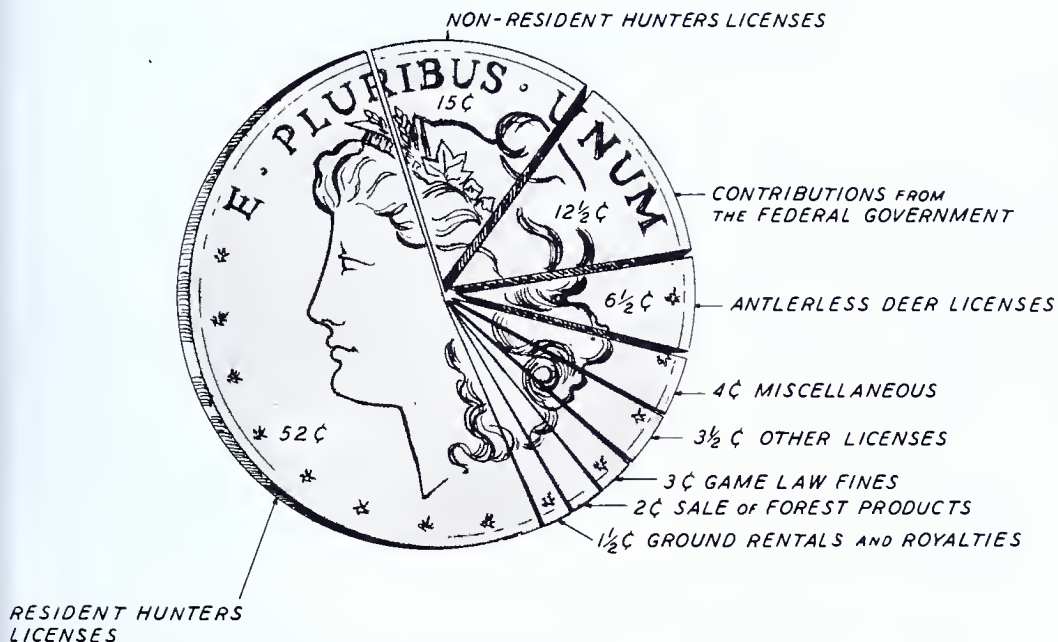
The expenditures of the Commission during the fiscal year ended May 31, 1959 have been subdivided into major activity groupings as follows:

		Part of Dollar
Acquisition and Management of Land for Wildlife. Management of State Game Lands, Cooperative Farm-Game Projects and other leased areas. Also payments in lieu of taxes on State Game Lands .....	\$2,251,528.40	43.0
Propagation of Game. Operation of Game Farms, purchase of game, wild game transfer, distribution of game .....	1,000,438.49	19.0
Protection of Wildlife. Salaries and expenses for enforcement of game laws, assistance in enforcement of fish, dog and forest laws; and numerous other field activities. Also salary and expenses of Radio Engineer .....	904,922.66	17.0
Division of Administration. Game News, other publications, exhibits, motion pictures, radio and TV programs, attending Sportsmen's meetings, and other related Conservation Education Activities. Costs of Personnel and Service Sections .....	384,822.66	7.0
Ross Leffler School of Conservation. Instruction and training costs for student Game Protectors and maintenance costs of the buildings .....	87,960.86	1.5
Bounty Payments, bear damage claims and deer proof fences .....	125,287.68	2.5
Issuing Hunting Licenses. Includes tags, applications, reports .....	113,265.84	2.0
Contribution to State Employee's Retirement System .....	107,753.00	2.0
Wildlife Research. Wildlife studies to determine practical methods for developing management programs .....	90,317.69	1.5
Accounting. Preparation and audit of payrolls, vouchers, maintenance of accounts, Auditor General's fees, etc. ....	94,731.38	2.0
Contribution to Social Security .....	52,500.00	1.0
Executive Office. Salaries and expenses, also expenses of Commissioners .....	42,887.19	1.0
Restricted Revenue Act 43-1955 Session. Land Acquisition .....	18,423.63	.5
<b>TOTALS</b> .....	<b>\$5,274,839.44</b>	<b>100.0</b>



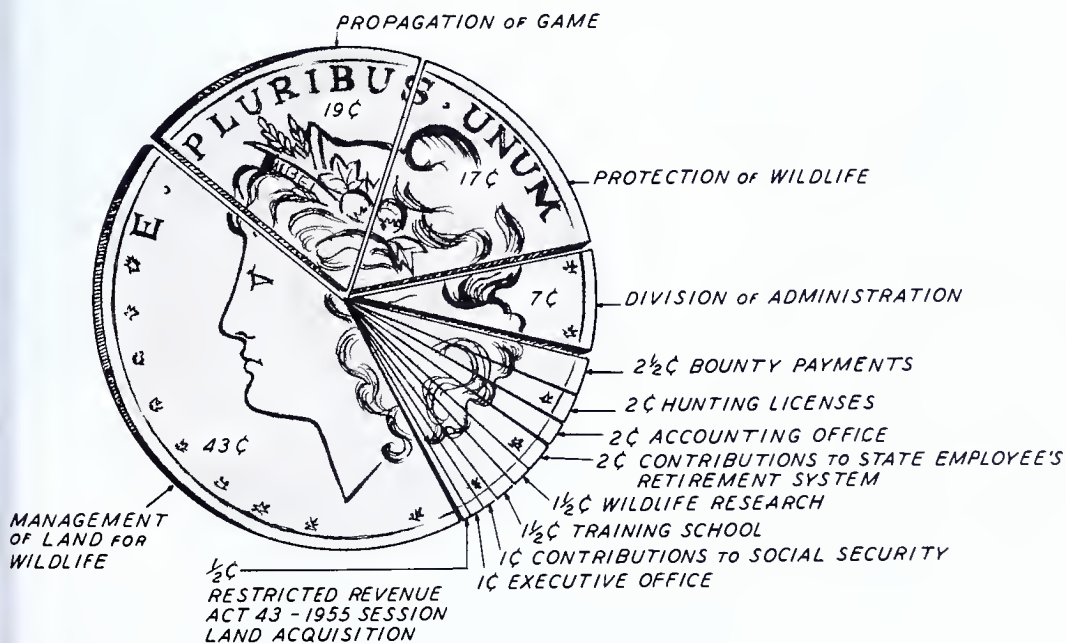
## WHERE the GAME FUND DOLLAR CAME FROM

### DURING THE FISCAL YEAR 1958 - 1959



## HOW the GAME FUND DOLLAR WAS SPENT

### DURING THE FISCAL YEAR 1958 - 1959



**SCHEDULE IV**  
**PENNSYLVANIA GAME COMMISSION**  
**STATEMENT OF REVENUE, EXPENDITURES AND CASH BALANCES**  
**FISCAL YEAR JUNE 1, 1958 TO MAY 31, 1959**

REVENUE		
Cash in State Treasury to Credit of "Game Fund" June 1, 1958		\$ 5,109,842.37
Less: Unpaid Vouchers in Fiscal Offices as of May 31, 1958		- 128,219.17
		<u>\$ 4,981,623.20</u>
Net Amount Available for Expenditure as of June 1, 1958		
Receipts June 1, 1958 to May 31, 1959:		
Resident Hunters' Licenses	\$ 2,834,588.98	
Non-Resident Hunters' Licenses	822,763.80	
Antlerless Deer Licenses	349,238.90	
Archery Licenses	145,268.65	
Non-Resident Trapping Licenses	250.00	
Special 3-Day Non-Resident Regulated Shooting Ground Licenses	9,143.35	
Special Game Permits	20,578.00	
Game Law Fines	165,703.50	
Interest on Deposits	25,787.30	
Sale of Skins and Guns	4,501.90	
Sale of Unserviceable Property (Through Property and Supplies)	1,272.36	
Miscellaneous	23,910.03	
Rental of State Property	24,805.47	
Sale of Wood Products	122,599.37	
Contributions from Federal Government	691,625.21	
Sale of Publications	55,603.49	
Interest on Securities	83,840.35	
Leased Lands Act 43-1955 Session	2,610.35	
Ground Rentals and Royalties (Gas Wells)	39,414.94	
Coal Royalties	40,122.61	
Total Receipts from All Sources		<u>5,465,628.76</u>
Total Funds Available During Year		<u>\$10,447,251.96</u>



## CLASSIFICATION OF EXPENDITURES BY ORGANIZATIONAL UNITS

Classification of Expenditures	Conservation										Total
	Exec. Office and Accounting	Division of Administration	Conservation School (Instruction and Training)	Division of Propagation	Division of Research	Division of Law Enforcement	Division of Land Management				
Salaries	\$ 84,871.96	\$167,874.35	\$ 38,885.02	\$ 193,630.68	\$ 51,884.25	\$ 493,200.04	\$ 362,709.66	\$1,393,055.96			
Wages	2,523.48	11,426.51	10,931.03	212,120.42	5,560.98	113,619.82	706,897.33	1,063,079.57			
Printing and Stationery	914.93	86,352.83	159.38	121.07	194.01	10,309.96	6,555.62	104,607.80			
Food and Forage		22.88	11,461.13	210,115.12		331.95	51,570.57	273,501.65			
Materials and Supplies	604.70	20,936.93	3,047.09	276,281.82	3,194.52	34,252.28	153,733.14	492,050.48			
Fees and Professional Services		15,744.93	625.70			2,740.00	4,960.75	24,071.38			
Traveling Expenses	7,565.16	29,467.36	13,743.77	35,229.19	13,300.01	206,339.70	100,109.00	405,754.19			
Motor Vehicle Supplies	385.45	1,434.82	877.96	14,590.70	53.85	2,496.81	60,602.24	80,441.83			
Postage		23,431.79	5.25	1,723.17	75.38	2,040.46	4,535.73	31,812.32			
Telephone and Telegraph	1,577.49	3,882.90	301.94	8,319.96	686.46	16,170.75	17,127.11	38,066.61			
Newspaper Advertising						11,444.82	1,009.56	12,454.38			
Light, Heat, Power and Fuel		1,000.23	1,732.00	11,671.53		435.51	2,453.63	17,292.90			
Contracted Repairs	91.16	2,645.69	1,859.32	4,586.80	9.15	650.00	20,746.73	30,588.83			
Rent of Real Estate		1,350.49		2,360.95		1,392.57	7,126.49	12,230.50			
Rent of Equipment	10,020.00	419.03		3,835.73	199.00	204.05	9,562.26	24,240.07			
Insurance, Surety and Fidelity Bonds	744.49	1,868.13	272.99	5,111.46	303.27	3,215.46	7,666.84	19,180.64			
Other Maintenance Services	26,725.56	5,901.00	826.02	2,401.79	225.56	5,058.75	4,815.42	45,954.10			
Motor Vehicles							91,031.70	95,435.95			
Equipment and Machinery	1,015.74	5,728.97	1,255.05	7,203.41	131.25	9,368.56	111,854.53	136,557.51			
Land							375,072.57	375,072.57			
Buildings and Structures				1,621.07		1,651.17	59,507.94	63,405.96			
Non Structural Improvements		625.78						6,767.13			
Grants and Subsidies		4,710.00	1,977.21	4,789.92				19,210.00			
Bounties and Gratuities					14,500.00			125,287.68			
Fixed Charges				318.19			91,879.58	92,198.49			
Refunds of Receipts	578.45							578.45			
Restricted Revenue Act 43-1955 Session—Land Acquisition	\$137,618.57	\$384,822.62	\$ 87,960.86	\$1,000,438.49	\$ 90,317.69	\$1,030,210.34	\$2,251,528.40	\$4,982,896.97			
TOTAL EXPENDITURES BY GAME COMMISSION								18,423.63			
										\$5,001,320.60	

Plus: Expenditures by Other State Departments

Department of Revenue—Printing Hunting Licenses, Tags and Miscellaneous Forms (\*)

Department of State—Contributions to State Employees' Retirement System (\*)

Department of Labor and Industry—Contributions to Social Security (\*)

## TOTAL EXPENDITURES

Cash Balance May 31, 1959 Available for Expenditure During Fiscal Year 1959-60

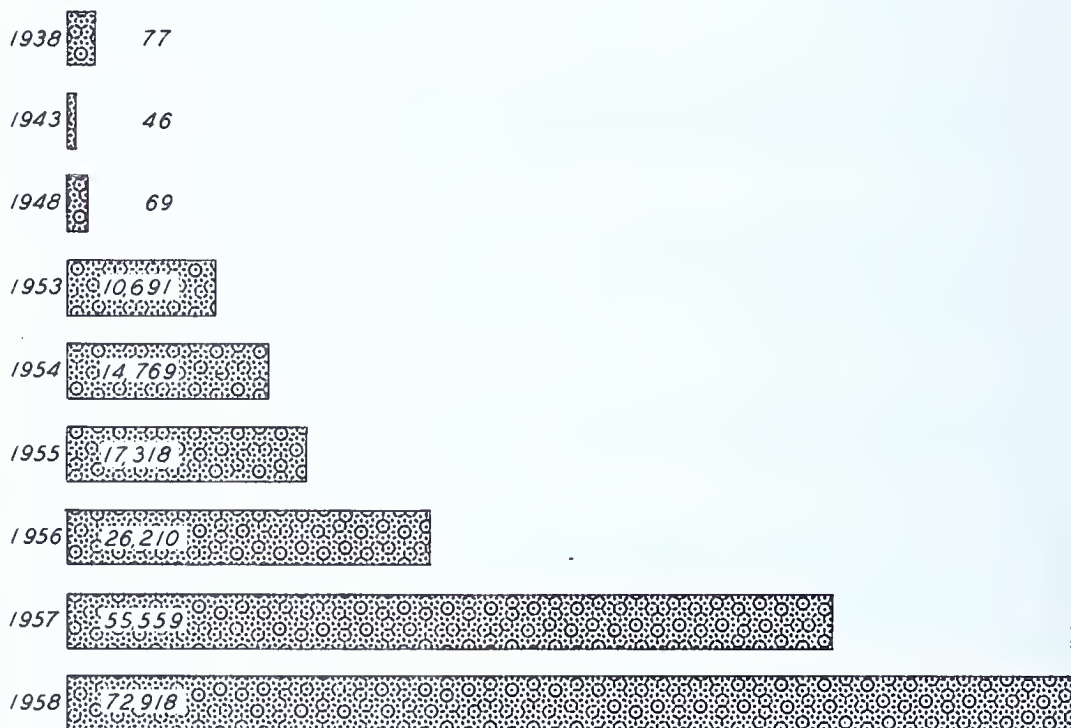
Plus: Unpaid Vouchers in Fiscal Offices as of May 31, 1959 Amounting to

Cash Balance in State Treasury to Credit of "Game Fund" May 31, 1959 (Includes U. S. Securities in the amount of \$3,176,865.78)..

(\*) These items are paid out of the "Game Fund" upon requisitions drawn by the Department of Revenue, Department of State and the Department of Labor and Industry and are included to complete the picture of the "Game Fund" finances.

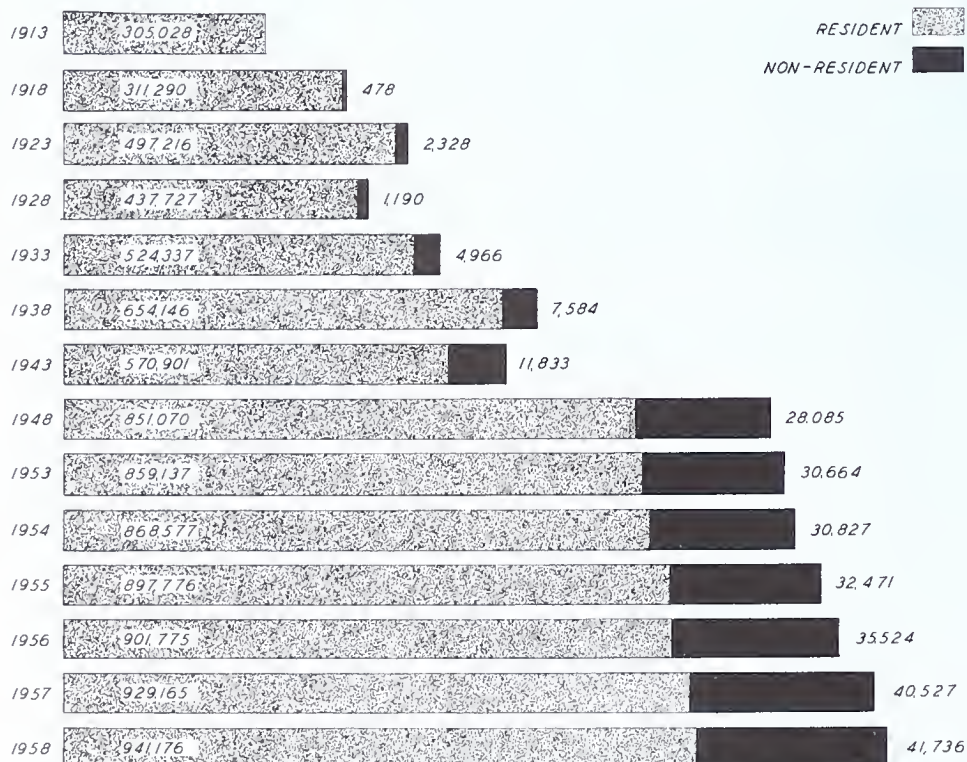
## ARCHERY LICENSE SALES

1938 - 1958



## HUNTING LICENSE SALES

1913 - 1958







# The Winner And Still Champion

By Bob Parlaman

Conservation Information Assistant, Northwest Division,  
Pennsylvania Game Commission

**W**E thought that a good approach to the desirable chore of getting a story and pictures about the new NATIONAL CROW SHOOTING CHAMPION was to challenge him to a match. It was to be a "two to one" deal—Jerry Stager, Erie county district game protector and myself against the "champ." We found him more than willing and able.

It has been my pleasure to see some of the best artists with a shotgun in action but I would have been denied a treat if I had never witnessed Bob Martin, an Erie resident and native, in action on crows. The 1959 Crow Shooting Champion is outstanding to say the least and I might add he had little trouble in beating both of us.

This is the first time that Pennsylvania can boast of a National Crow Shooting Champion and brag of one that established a new all-time high for the number of crows killed in the allotted time—48 crows in three hours. The previous high was 45.

Bob admits that his 15 years of hunting experience was responsible for his crow hunting ability and interest. He estimates that he kills about 3,000 crows a year. Competitive crow shooting started four years ago and his first try resulted in a place in the Novice Class in 1956. An unassuming fellow, he gives credit to his local buddies who encourage his shooting and practice with him. Charlie Moses and Jerry Stager have always been encouraging with their



ONE—TWO—THREE! The “Champ” calls (bottom left), takes aim (top left) and scores (above). Fast is the word for Martin when he goes into action. For these pictures, he removed his hat but camouflage is his byword in crow hunting. Practice with a gun that fits him perfectly is one key to his success in shooting.



compliments. His keen interest and constant practice sessions on the things that he thought it would take to win the coveted trophy are what paid off. He is no sooner pulled off the highway than he is calling and shooting. There is no lost motion.

Bob, in a family affair, operates an Atlantic Service Station in Erie on Station Road. He finds that his hunting experiences go well with his business and friends. It was a business associate, Harry Cochran of Cincinnati, who sells steam cleaners and has been a crow hunting devotee for many years, that got the “Champ” off on the right track and interested him in competitive crow hunting. Harry and Bob teamed up to win the 1959 Doubles Championship (two men hunting together). They co-



operated to kill 50 birds in three hours. Although Bob's wife, Jean, and his two young daughters don't always share this enthusiasm, especially when dinner is waiting, they have also been encouraging indeed.

This year Kentucky played host to the 1959 Championship Hunt, with headquarters at Frankfort the weekend of June 19, 20 and 21. Martin was high in his praise of the hospitality and excellent guidance that was provided by the officials and the Kentucky Game and Fish Department through their Conservation Officers who accompanied the competitors. Kentucky will again play host to the event in 1960.

The National Crow Shooting Association is a well established organization with headquarters at Warsaw, Kentucky. Harold Skinner is president and Cliff Crouch, Secretary. Their one objective is to control the crow through the sport of shooting.

There were 53 entries in this year's championship. In three hours the contestants killed 920 crows in the singles events and 840 in the doubles. F. Ogden, the 1958 champion, finished with 23 birds. As Bob Martin puts it, the event is not unlike a horse race with the contestants off and running, accompanied by two individuals as guide and judge. A pre-arranged route is followed but the contestant must pick his own stops. Only crows

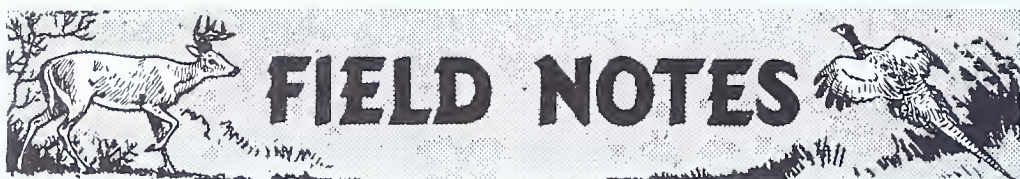
that are retrieved are counted so it is important to kill clean with no cripples.

When asked about his secrets, if any, Bob stated that there were none. He just likes to shoot and crows are about as sporting a target as you can find. His calling is done with a Turpin Crow Call, he shoots a Browning Auto-Loader and credits his clean kills and lack of cripples to the load he uses, made by the Federal Cartridge people with  $3\frac{1}{2}$  drams of powder and  $1\frac{1}{2}$  ounces of Number 8 shot. He insists on camouflage as much as possible, even on his hands. He scoffs at some of the old established principles and kills them as fast as he can, using a dead crow for a decoy. We observed that Bob has unlimited calling power and seems to know when the crows are shy and won't linger long.

But above all else, Bob is an avid advocate of practice and more practice. His interest and enthusiasm in crow hunting are catching and he has encouraged many beginners, giving freely and willingly of his time and advice to the novice. Bob Martin, Erie, Pennsylvania's new National Crow Shooting Champion, also finds that there are many other benefits from crow shooting than merely controlling these black bandits—it especially helps him in his second love—duck shooting.

**CHAMPION CROW HUNTER** and his companion, Pennsylvania Game Protector Jerry Stager, right, pose at the end of their hunt. Thirty crows were killed and retrieved in this match.





### Turkey Hunter's Dream

**POTTER COUNTY**—On July 4 while traveling along a State Forest road in Homer Township, I saw a most encouraging sight. I stopped the car to let a flock of turkeys cross the road, and by actual count, saw five turkey hens and thirty-nine young turkey poults cross the road. All the poults were approximately the same size, a little bigger than grouse and nearly the size of pheasants. That is more turkey broods than I saw all last summer.—Rozell A. Stidd, District Game Protector, Coudersport.

### Cherry Picker

**HUNTINGDON COUNTY**—July 27, Supervisor Brown and I were informed of a less strenuous way to harvest cherries or berries than climbing the tree. Mr. Leonard Combee, Huntingdon, RD #1, has a large red mulberry tree located near his barn. One afternoon recently Mr. Combee noticed his cats, which usually take their siesta beside the barn, behaving in a strange manner. Closer observation revealed a large racoon astride one of the lighter branches of the mulberry tree vigorously shaking same. After dislodging some of the berries Mr. Coon would then clamber to the ground and devour the tasty morsels.—Richard Furry, District Game Protector, Huntingdon.

PICKIN' MULBERRIES  
AGAIN, EH?



### Old Trophies Fade Away

**FULTON COUNTY**—Fish Warden Richard Owens and I were patrolling the Juniata River on July 26. We found a beautiful Walleye of approximately 32 inches that had quite recently met some unknown death. Losses such as this can never be eliminated entirely. When I have occasion to pick up a trophy buck mangled by an auto or find an old Monarch Turkey that has carried poorly placed shot to a lingering death, I invariably think of how happy this lost trophy would have made some sportsman.—Carl Jarrett, District Game Protector, McConnellsburg.

### Stinky Trick

**JUNIATA COUNTY**—At my headquarters on July 29 at 7 a.m. the phone rang and Harry Renninger a local sportsman in Mifflintown said to me "Come on down right away. I've got a problem." I went immediately and the little problem was a half grown skunk on his elevated back porch. It had gone up for a meal and was afraid to go down the steep steps and was loosing its temper fast. I laid a board up along the steps for it to walk down and we went out front while it started down. His next door neighbor came out for milk and Harry cautioned her about going out, saying there's a skunk out there. She replied "O, that must belong to my other neighbor. He has two pet ones." Sure enough the neighbor was the proud owner of 2 pet deodorized skunks. Harry said he would have to quit running around in the woods and start staying at home to find out what's new with his neighbors.—Robert Shaffer, District Game Protector, Mifflintown.



### Beavers Beware

**PIKE COUNTY**—On July 24, I took care of a beaver damage complaint in eastern Pike County for Game Protector Dan McPeck. I had a live trap set near the beaver house which was located in a bait fish pond near Rowlands. I checked the trap about 2:30 p.m. but Mr. Beaver had avoided the area of the trap since he had a day or so before sprung one of the old live traps. The springs had weakened and I removed the trap and had re-set a brand new one. Before I left the trap, I placed some beaver lure beyond the trap so that the beaver would have to swim over the trap. I then looked over the pond for signs of where they were coming out on the banks and a nephew who had come with me said, "There is the beaver." He had appeared about 100 feet from the house. He then dove and swam under water to the house. When he surfaced, I could see that he got a wiff of the lure. He then approached the area cautiously and sat on the open set trap. I could see the trigger just in front of his nose. He knew it was there but swam to the right and over the trap up to where I had placed the lure. My nephew and I were only about 30 feet away and crouched low to observe the action. He then proceeded to smell the lure and look about slowly and suspiciously. Being satisfied or else, he then swam out and bang, he tripped the trap and of course became a DP Beaver.—Albert J. Kriefski, District Game Protector, Hawley.

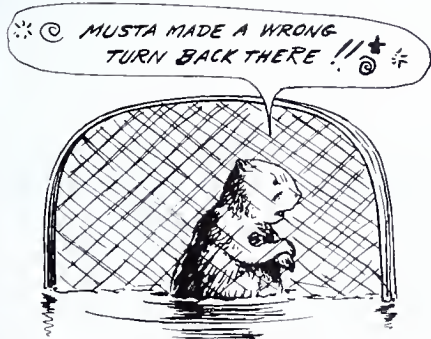


### Bruin Burial Grounds

**ALLEGHENY COUNTY**—On July 29 Assistant District Ranger Dick Obyo of the Allegheny National Forest called my attention to a crippled bear near the Kane Experimental Station in the Allegheny National Forest.

I went to the area described by Dick and followed the trail left in the leaves for about  $\frac{3}{4}$  of a mile. As I approached the bruin he made an attempt to get away, but could not make much headway due to a paralysis condition in the hind quarters. After satisfying myself that the animal could not recover, I disposed of it. I made a thorough examination and decided that the condition was probably due to old age. The animal showed no sign of fresh wounds, but there were numerous old battle scars and bullet wounds. The tusks and teeth were worn to the gums.

It is my opinion that his old warrior was about ready to make his way to the happy hunting grounds. It would certainly have been interesting to know the background of that old fellow.—Leo A. Milford, District Game Protector, Portland Mills.



### Stag Party

**CLEARFIELD COUNTY**—Recently while on evening patrol accompanied by a Deputy, we observed a herd of deer in a farmer's field. We approached the field and the Deputy exclaimed "My gosh those are all bucks." There were seven bucks in the herd.—Claude B. Kelsey, District Game Protector, Troutville.

## Two-legged Predators

FRANKLIN COUNTY — During the month of July two separate instances of extensive poultry losses had us nonplussed to identify a culprit.

The first instance involved the loss of eight pullets which were removed from their coops without leaving a sign of feathers, blood, or tracks. At first dogs were blamed, then foxes, and finally a host of theories were advanced from numerous local officials and helpful laymen.

The fall guy in this case turned out to be a poor skunk who happened to waddle into one of the several traps which were set around the area. But one theory voiced, and probably one closer to the truth than any other, was that the predators in question walked on their hind legs and were equipped with burlap bags.

The second instance of poultry damage posed the problem of identifying and capturing the predators responsible for the killing of about 75 turkey poults. All of the birds were killed within a space of a few nights and the various types of wounds on the dead birds gave evidence of the presence of several species of villains.

An extensive campaign was launched around the enclosure employing both trap and gun. Several nights of

this netted five red fox pups (half grown), one large male racoon, two opossums, and one skunk.

It would appear, from the tally, that every breed of carnivore in the vicinity had been duly notified of the convenient free lunch available from this particular poultryman.—William J. Lockett, District Game Protector, Doylestown.

## Nothing Ventured, Nothing Gained

VENANGO COUNTY—A rabbit damage complaint this month brought to mind how little many people know about coping with a wildlife situation. A rabbit trap was given to a family to take a rabbit or two out of their garden. After some time, I stopped to pick up the trap and ask how many rabbits were taken. I was told they had caught a rabbit, but didn't have the heart to kill it. A neighbor offered to shoot it with a shotgun, but they didn't want to do this, so they just released it. I asked why they didn't take it out into the country and release it. They just never thought of that and never thought of calling me.—R. V. Rea, District Game Protector, Cranberry.

## Salt Lick

JEFFERSON COUNTY—While sitting on the sun porch at the Ross Leffler School of Conservation, both resident instructors and student officers were surprised with the guests we were having share our "salt" with us. Three does were having quite a time consuming the calcium chloride we had earlier spread on the volleyball court.—Student Officer J. L. Wiker, Brockway.

## Nesting Success

NORTHAMPTON COUNTY—If all nesting cover sites could produce as well as one of the sites on a Farm Game Project #94, stocking game in Northampton County would be useless; unfortunately they don't. One of our co-operators agreed to let 1½





acres of nesting cover stand where he knew pheasants were nesting. A check of the area showed a total of 23 nests hatching out with an average of at least 10 young to the nest. Two nests in the area had been destroyed by predators. This kind of an average can be produced only through the best cooperation of the farmer. Early in the spring he begins to observe the location and travel routes of the hens and pays strict attention to their habits. When he mows his hay he knows exactly where to be cautious, and in that way preserves the nests to the best advantage. Without his cooperation, a sharp decrease of population of pheasants would be noted in that area.—Harold Wiggins, District Game Protector—Nazareth.

### Striped Mongoose

INDIANA COUNTY—On July 22, 1959 with Farm Game Manager Empfield, we observed a chipmunk carrying something across the road ahead of us. We stopped and were surprised to see "Chippie" was carrying a ring necked snake. The Chipmunk then started to bite the tail of the snake, up the tail, and kept biting along the whole body until it came to the head. Having observed no life in the snake, the chipmunk then proceeded to eat the tongue and kept chewing around the snake's mouth. Evidently chipmunks like snakes' tongues.—A. J. Zaycosky, District Game Protector, Indiana.



### Cool Cottontail

CLEARFIELD COUNTY—One evening while patrolling near the Berwinsdale Lake I noticed a very small rabbit hop into the lake. I thought the rabbit had been frightened by something and would come right back, but as I watched it swim across the lake, it climbed up on the bank and proceeded on its way.

The lake at the point where the rabbit swam across was about 200 yards wide. I had seen nothing that could have frightened the rabbit, and as it was one of those hot humid evenings I imagine the rabbit just decided to take a swim to cool off.—John B. Hancock, District Game Protector, Irvona.

### Tough Nut

LUZERNE COUNTY—It is heartening to notice the struggle that the chestnut still makes along many of our roadsides to survive the blight that has afflicted it. Recently while patrolling S.G.L. #91 in Luzerne County, I came across several apparently healthy chestnut trees with trunks three to four inches in diameter growing in the midst of smaller dead or dying trees. It is a matter of conjecture as to how long and whether nature will produce a blight resistant strain of this valuable forest tree.—Edward F. Divers, District Game Protector, Wilkes-Barre.



## Mercer County's First Junior Conservation Camp

By C. Paul Blair

**T**HE Mercer County Council of Sportsmen's Clubs successfully conducted their first annual Conservation Education Camp for Juniors this past summer. The school was organized under the chairmanship of Allen Morris, of Transfer, vice-president of the Council. Other members of the committee included: Edward Hutcheson, Grove City; Seth L. Myers, Sharon; Richard Ablanalp, fish warden, Mercer; Arden Fichtner, game protector, Greenville; Arthur Biondi, game protector, Mercer; Robert Dunn, Council president, Sharon; and the writer. Members of the staff included: Leroy Gathers, senior counselor, Hermitage; Danny Ristvey, Sharon and Terry Bowman, Farrell, junior counsellors. Ristvey

attended the Federation's Junior Conservation Camp near State College in 1957; Bowman attended the 1958 session.

The school was held during the week of June 21-27 at the Pardoe Sportsmen's Club grounds near Pardoe, Mercer County. After being thoroughly screened by their home clubs, receiving the consent of their parents and passing a thorough physical examination by their family doctor, the boys were required to check into camp on Sunday afternoon for assembly and instructions. Robert D. Parlamen, Conservation Information Assistant, Northwest Division, Pennsylvania Game Commission welcomed the boys to camp in behalf of the Council. Starting



Monday morning, reveille was at 6:00 a.m. with taps at 10:30 p.m. Meals were served by a nearby caterer under contract with the committee.

Much credit for the smooth operation of the camp school went to members of the Butler and Lawrence county groups for their generous aid in furnishing copies of printed programs, sketches and much needed advice obtained through their experiences in conducting similar camps in the past.

Each boy was carefully graded each day, first on leadership, manners, neatness, attitude, promptness, obedience and participation; second on notebooks; and third on a written examination of 75 questions at the end of the week. Monday's daylight schedule was devoted entirely to a Hunter Safety course given by game protectors Art Biondi and Arden Fichtner. The evening program consisted of talks by Captain Robert Burns of the ROTC unit at Grove City College dealing with civil defense and air force tactics.

Tuesday morning's program was conducted by Bob Parlaman with instruction on game laws and Game Commission history. Tuesday afternoon the program was provided by Richard Bowman, farm forester, Clarion District, Pa. Dept. of Forests and Waters, explaining farm woodlot management. The Mercer County Soil Conservation District presented an interesting program on soil conservation under president Melvin Bliss, assisted by Donald Williams and Richard Crawley of the U.S. Soil Conservation Service. Tuesday evening's program was a welcome change for the boys with instruction on clay target shooting. Members of the Pardoe Sportsmen's Club shooting team furnished ammunition and instruction. As usual, each evening's program was tapered off with movies, mostly on the subjects covered during the day.

Wednesday morning the boys were

presented with a program on State Police law enforcement methods and procedure by Robert Crowthers of the State Police Barracks at Butler. Wednesday afternoon's program included water safety instructions, swimming and life saving methods by Joseph Mater, instructor at the McClintick Swimming School, Sharon. Later, the Pymatuning Power Squadron under Commodore William DeForest and public relations director Hartley Dermond stressed boating safety to this group of young conservationists. A regular monthly meeting of the Mercer County Council of Sportsmen's Clubs was held at camp that evening, with all the students taking part as special guests.

Thursday morning was highlighted with a demonstration of the Fish Commission's newest conservation tool, an electrical fish shocking device, by Fisheries Biologist William Daugherty of the Commission's Northwest Division, assisted by Richard Abplanalp, fish warden for Mercer and Lawrence counties. Thursday afternoon Robert F. Shelby, deputy game protector of Linesville presented a program on predator control and trapping. A weiner roast and entertainment rounded out the evening program. Friday morning Paul Miller, Butler county game protector, presented an outdoor survival program which proved very exciting for the boys. That afternoon Charles Wing, of New Castle, gave a demonstration program on skin diving. Friday evening members of the Mercer, Grove City and Shenango Valley Archery Clubs gave archery instructions to all the boys. Saturday morning was entirely taken up with the written examination. That afternoon saw the policing of the grounds, packing of duffle, presentation of diplomas, camp shirts, brassards, and then fond farewells and departure for home.

Mercer County's first annual conservation camp had come to a fitting close.



# CONSERVATION NEWS

## American Forestry Association to Hold 84th Annual Meeting at Bedford Springs Oct. 11-14

With Laurance Rockefeller, Chairman of the Outdoor Recreation Resources Review Commission, as guest of honor, resources experts as panelists, informative field trips to point up discussions, a barn dance and ox roast, and "Howdy The Racoon" as a star attraction, the joint conference of The American Forestry Association and The Pennsylvania Forestry Association will be held at the Bedford Springs Hotel from October 11-14.

It will mark the third time that AFA and PFA have met jointly. The first was in 1889 at Philadelphia; the second was held in 1936 at Eagles Mere. In honor of this long, close association descendants of key men in both groups—Bernard Edward Fer-

**CROW HUNTING CHAMPION** Jerry Stager, Erie, is congratulated by Commissioner Andy Long of the Game Commission. Stager took top honors with 471 pairs of crows feet in a contest conducted among field officers of the Commission's Northwest Division.



now of AFA and Joseph Trimble Rothrock of PFA—will be honored guests at the annual banquet Tuesday evening, October 13.

The significance of the conference's theme, "Resources and People—A Challenge of Co-existence," will be dramatically revealed during field trips and then thoroughly analyzed by panels of experts in the various fields of renewable natural resources.

## Basset Hound Field Trials Set for October 9, 10 & 11

The Basset Hound Club of America invites you to a three-day trial to be held at the Lebanon Beagle Club Grounds, Lebanon, Pennsylvania, beginning Friday, October 9 and continuing through Sunday, October 11, 1959. Derby hounds and champion stakes will be run on Friday, October 9; October 10, All-Age Male stakes will be run; and on Sunday, October 11, All-Age Females and Best of Winners Stakes. There will be trophies and rosettes for all placings.

The Susquehanna Basset Hound Club will host the Basset Hound Club of America at its annual meeting and dinner, Saturday evening, October 10, 8 p. m. in Shartlesville, Pennsylvania, which is located about 15 miles from the Lebanon Beagle Club Grounds. All interested persons are cordially invited to attend both the field trial and annual meeting.

More information regarding the trial and meeting may be obtained from either Mrs. Dorothy K. Shula, Secretary, Basset Hound Club of America, 552 West 88th Place, Los Angeles, California, or from Mrs. Dorothy Bowers, Secretary, Susquehanna Basset Hound Club, Rt., 1, Box 648A, Lancaster, Pennsylvania.





HUNTER SAFETY TRAINING has been a major project of the Lock Haven Police Department for the past five years. This past summer classes were held for area youths from August 3-6. Each class underwent intensive training in safe gun handling, range firing, and other phases of the N.R.A. course. Instructors, shown above, were, first row, left to right: Robert Murphy, Clair Young, D. G. Orndorf, Richard Ziegler, Clair Reider. Second row: William Wenker (officer in charge), Game Protector Charles Keiper, Elmer Powers, and Game Protector Ivan Dodd.

## Burning Trash Leading Cause Of Forest Fires In Pennsylvania

Secretary of Forests and Waters Maurice K. Goddard reports that one-fifth of all the forest fires this year in Pennsylvania have been caused by "the carelessness of people burning debris or trash."

Goddard said that 170 fires of the 850 reported this spring were caused by brush burning and similar activities. The second leading single cause was railroads with a total of 130, followed by 110 fires set by incendiaries.

"Careless smokers were responsible for 97 fires," Goddard stated.

While the number of fires so far places 1959 above the five-year average for Spring forest fires, Goddard remarked that the season was not as severe as 1955 when 932 fires were reported.

A total of 24,000 acres were burned this past Spring. The five-year average for Spring fires is 17,967; the ten-year average is 24,000.

Goddard stated that the heaviest fire losses were inflicted on the southern and eastern counties of the state.

## Soil Conservation Stamp

The world's first soil conservation commemorative stamp was released at Rapid City, South Dakota on August 27. The stamp is unusual in that it recognizes no anniversary and honors no person specially. It is issued as a tribute to all farmers and ranchers who have put to use soil and water conservation measures shown on the stamp design—strip cropping, terracing, pasture improvement, pond construction, and tree planting.

The stamp is a salute to state and federal scientists and technicians who have carried on research, found better ways of protecting the land and helped landowners to carry out conservation plans. It portrays the beauty as well as the bounty that modern conservation practices bring to rural living.

The commemorative stamp will serve to remind citizens of the United States that care of the land is the common concern of city people, farmers and ranchers alike—the land being our primary source of food, shelter, clothing and wildlife.

## Health Dept. Lifts Importation Ban on Wild Rabbits from Kansas

Since 1954 by regulation of the Pennsylvania Advisory Health Board, the importation of hares, rabbits and rodents from areas known to be infected with certain diseases has been restricted. Fifteen States were listed as off-limits for importation. Kansas was among the States banned.

The Secretary of Health recently issued a directive lifting the ban on rabbits and hares originating from Kansas. The Department's Veterinary Public Health Section, after study and investigation, determined that the importation of wild rabbits and hares from the State of Kansas does not appear to be injurious to the health of the people of Pennsylvania.

It is necessary for persons desiring to import rabbits from out of the State to send an application to Commonwealth of Pennsylvania, Department of Health, Harrisburg for an importation permit. The importation of rabbits without this permit will be in violation of the Department's regulation.

Although the ban was lifted from a public health standpoint, the Pennsylvania Game Commission does not encourage importation of rabbits from outside the state. Studies have shown that such importations do not permanently increase the rabbit population. There is also considerable risk of introducing serious wildlife diseases and parasites into native rabbits. Sportsmen's clubs considering the purchase of Kansas rabbits are urged to investigate the possibilities of spending their time and money in improving food and cover conditions on their grounds or in their local areas. Such practices have been found to produce many more rabbits than the release of cottontails shipped hundreds of miles from their original homes.

## Commission Sets Special Regulations for Concurrent Beaver-Muskrat Season

The Game Commission has called the attention of fur trappers to the extended season for taking muskrats during the 1959 hunting license year and to certain special regulations that will apply during this period.

In addition to the "regular" muskrat season—November 21, 1959 to January 16, 1960—muskrat trapping will be permitted February 13 to March 19, 1960.

Within both periods muskrats may be trapped in unlimited numbers. However, the restrictions as to where muskrat traps may be set during the beaver season, which coincides with the extended rat season, are the same as those for beavers. Special regulations "prohibit one person from setting, tending or in any manner operating more than ten (10) traps (for either beavers or muskrats) in any area or areas where beavers are known to exist."

Under authority vested in it, the Game Commission has also ruled that during the concurrent beaver-muskrat season in 1960 "it shall be unlawful to set a trap or traps on the structure of any established beaver dam or beaver house or within twenty-five (25) feet of the waterline of the structure of either said beaver dam or beaver house. The tags on all traps set in any area or areas where beavers are known to exist shall be so placed that they will be above the ice or waterline to facilitate identification without disturbing the traps."

One of the reasons behind the extended muskrat season is to encourage farm boys to remove these furbearers from farm ponds, thereby reducing the damage done by rats to such impoundments. There will be no natural resource or economic loss because muskrat pelts are prime during the period the extended season will be in effect.





**NATIONAL ARCHERY CHAMPIONS** earned their titles at the 75th Diamond Jubilee Tournament in Lancaster, August 17-21. Left to right: Bob Kadlec, Rochester, Minn., 2nd place, men's division; Wilbert Vetrovsky, Cleveland, Ohio, Men's Champion; Thelma Murff, Arizona, 3rd place, ladies division; Betsy Hibbard, Harrisburg, Pa., 2nd place; Carole Meinhart, Pittsburgh, Pa., Ladies Champion.

### **Pennsylvania Writers and TV Programmer Receive Recognition**

Two national organizations recently honored Pennsylvanians for the excellence of their reporting or televising the outdoor scene.

The American Association for Conservation Information, meeting in the Poconos, acclaimed A. R. Grove for his informative column appearing in the *Centre Times*, State College. Roger Latham was similarly recognized for the excellence of his outdoor reporting in the *Pittsburgh Press*. Harry Allaman received an award for his outstanding program "Call Of The Outdoors," telecast from Station WGAL-TV, Lancaster.

In Hot Springs, Arkansas the Outdoor Writers Association of America elected Eldy Johnston a director of the organization. Johnston has capably reported on the outdoors, through word and picture, in the *McKeesport Daily News* and a national steel magazine.

### **Recreational Use of Allegheny Forest to be Studied in National Inventory**

A detailed review of the fast-growing recreation use on the Allegheny National Forest of the U.S. Forest Service has been announced by Forest Supervisor John E. Franson, at Forest Service headquarters, Warren, Pennsylvania.

The Allegheny National Forest, as a part of a nation-wide review of recreation use, is presently engaged in plans to begin on-the-ground studies by July 1. The purpose of the study, called the National Forest Recreation Resource Review, is to obtain a clear picture of recreation resources and opportunities on these public lands. Facts thus gained will be used as the basis of programs to meet the ever-increasing demand by the public for recreation facilities. The review, according to Mr. Franson, is expected to supply information needed by the National Outdoor Recreation Resources Review Commission, which was established by law in 1958.

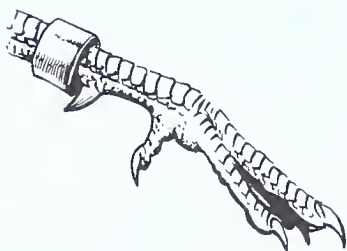
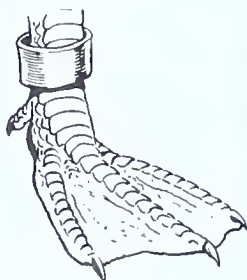
# HUNTERS ATTENTION!



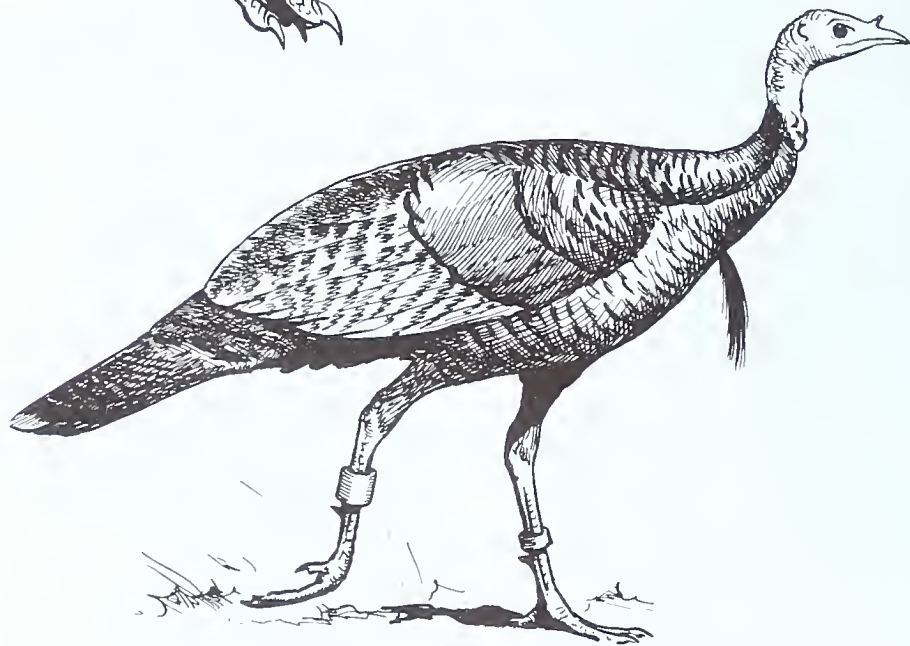
PLEASE HELP US MAKE  
BETTER HUNTING FOR YOU!



WE Banded  
THE WILD  
DUCKS WE  
RELEASED —



AND SOME RINGNECKS —



WE ALSO RELEASED A LARGE NUMBER OF  
FARM-REARED WILD TURKEYS MARKED  
WITH BOTH METAL AND PLASTIC BANDS.

WE SPENT YOUR MONEY DOING THIS BECAUSE



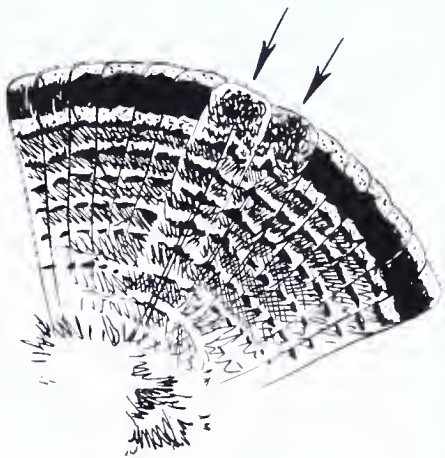
IT IS THE BEST WAY OF FINDING OUT MANY THINGS-  
HOW LONG THEY LIVE, HOW FAR THEY TRAVEL AND  
WHERE THEY GO, HOW MANY  
ARE KILLED BY HUNTERS  
DURING THE SEASON, WHEN  
AND WHERE THEY SHOULD  
BE RELEASED, AT WHAT AGE  
SURVIVAL IS BEST, AND MANY OTHER FACTS.



THIS INFORMATION CAN MEAN BETTER HUNTING FOR  
YOU, AND WILL IF YOU SEND IN YOUR BANDS AND TAGS.  
DO IT THE SAME DAY YOU GET ONE.

ONE MORE THING!

WE WOULD LIKE TO  
HAVE THE GROUSE  
HUNTERS SEND IN THE  
WING TIP AND TWO CENTRAL  
TAIL FEATHERS AGAIN.



THIS WAY WE CAN KEEP  
ABREAST OF THE GROUSE  
CYCLE AND DETERMINE HOW  
SUCCESSFUL THE HATCH WAS  
THIS PAST SPRING, AND HOW  
WELL THE YOUNG BIRDS LIVED.

BANDS, TAGS, OR FEATHERS CAN BE HANDED TO YOUR  
LOCAL GAME PROTECTOR OR SENT DIRECTLY TO:

WILDLIFE RESEARCH DIVISION  
PENNSYLVANIA GAME COMMISSION  
HARRISBURG, PENNSYLVANIA

NED SMITH



# October Deer Hunt

By Tom Forbes

THE car left the main transportation route in the valley and started its climb to the high plateau. The black-top highway followed the windings of a mountain stream and we had glimpses of shaded pools where we had dropped a fly in search of trout less than a month ago. Little had changed. The clear, cool water tumbled over and around the rocks, moved quietly through the pools and hurried along through the riffles. We stopped the car and gazed quietly at a favorite pool. A late afternoon hatch of insects was emerging. The surface of the pool was broken by a rising fish. The driver shifted into gear with a smile on his face and each had his own thoughts of the evenings we had spent fishing along the banks of this pleasant stream.

The valley widened. We left the stream and topping a rise, the rolling farm lands with their scattered farm houses stretched before us and in the distance we could see the timbered slopes of the ridges in which our hunting camp is located. Turning on to a gravel surfaced road we point the car toward the forest lands. The last farm house is left behind and on a hill side pasture a herd of deer are grazing. A quick count shows an even dozen deer. The car stops and glasses are leveled; does with fawns, and yes one, no two racks are visible. The nearest deer, barely seventy-five yards away raises her head and stares in-



quiringly in our direction. Satisfied that no harm is intended she lowers her head again to graze.

A steep pitch in the road, the car labors in second, a sharp left turn looms ahead, the driver shifts to low and rounding the curve we surprise a nice 6 pointer standing on the shoulder of the highway. The road ahead straightens out as it enters the timber. The grade is easy and the driver shifts into high. We top the last rise and the road ends at an abandoned farm. Two deer are feeding in the old orchard. There is activity at the farm house which has been converted into a hunting camp. We wave a friendly greeting and pass by, taking the woods road toward our destination. Now the vegetation and trees crowd the sides of the old logging road and the branches of the oaks and the maples lining the sides of the road frequently meet overhead. Sitting on a stump adjacent to the road a ruffed grouse eyes the car with apparent indifference. We stop and admire the chunky king of the upland game birds who can burst into flight with an explosive roar that shatters the nerves of many a shot-gunner. For a long moment he stares at the car and then effortlessly flies deeper into the woods.

The woods road divides and we take the left fork at the head of a hollow that leads to our camp. The sun has disappeared below the top of the wooded ridge and a cooling draft of air moves down the hollow. Through the trees we catch a view of the camp lying in a little flat at the mouth of an intersecting hollow. Parking the car we take a moment to scan the small pool in the stream that flows past the cabin. Suddenly a trout rushes from one hideout to another. We count several and then turn to unloading our duffle and food supplies. Porcupines have gnawed at the floor boards of the porch in our absence. Quickly a fire is laid in the wood cooking stove to



take the chill off the air. The gasoline lantern is lighted; bunks are selected and duffle stowed. There is little conversation. Each member of the party chooses one of the many tasks necessary to set up housekeeping. On the stove the coffee bubbles in the pot and the odor of food mingles with the smell of wood smoke. Kindling is laid in the huge stone fireplace and a fresh back log set in position. A warmth permeates the cabin; jackets are laid aside, food appears on the table and we sit down to our first meal in camp. The dishes done, we gather around the fireplace and conversation becomes general. Tackle is laid out, licenses signed and attached to our outer garments, and plans are considered for the next morning's hunt. Incidents of previous years are recalled, stories retold, and all too soon it is time to hit the bunks. We step outside and gaze at the star studded sky. The breeze has died and the woods are silent. Signs point to a nice opening day and we agree that sunrise will come all too early.

In the vague light the mist swirls and eddies. We catch glimpses of the open meadow in which the old trees are located. An opening appears in the mist and a dark shape is outlined in the meadow. We stop and gaze intently and a nervous chill runs over us. Of course we are keyed up and our imagination can play tricks on us. Cautiously we move forward. The mist lifts and a gnarled old stump appears in full view. We smile, relax and continue to our stand.

The landscape brightens. Distant objects come into view and we scan the orchard carefully for signs of deer. Small birds begin their early morning conversation. Flitting in and out among the branches of nearby trees. A chipmunk calls loudly, the noise out of all proportion to his size. Suddenly he appears on top of a nearby rock, surveys the surroundings and then scampers off in search of breakfast.

Now the first rays of the morning sun strike the meadow. The grayness disappears and objects stand out in bold relief. Slowly we scan the foreground and the edges of the timber which borders the orchard land. An apple drops from a nearby tree, bounces from a limb and lands with a thud on the ground. We turn quickly. Nerves. We decide to relax and settle ourselves comfortably in our blind. Could do for a smoke. Better not. Deer have a keen sense

of smell. We can do without the smoke.

Raising our field glasses we carefully scan the edges of the timberland. The shadowy depths show no sign of deer altho we feel certain that they must be in the vicinity. Our eyes sweep the entire expanse and a movement attracts our attention. Two deer have stepped from the timber and are standing surveying the orchard. Our pulse quickens. Things are picking up. More than 100 yards away they stand for several minutes motionless and then walking in single file move toward the nearest apple tree. Munching on the fallen apples they occasionally raise their heads and cautiously survey the vicinity. Reassured, they idly switch their tails and resume feeding.

Suddenly both heads come up and with ears forward, the deer stare fixedly in our direction. Why? We are hidden. Has our man scent been carried to them? To our ears comes a noise from the timber at our backs. Much the same that a squirrel would make as it scampers through the leaves. We shift our gaze to the direction of the sound. Thirty yards away a doe runs out into the meadow, slows to a walk and heads for the apple tree in front of us. She feels safe as she has seen the other deer in the orchard before she ventured into the opening. Now we must decide. We have debated endlessly; buck or doe. Well, the first good chance is a doe. It's the first morning. In fact it is the first hour. Is this the deer we try for or do we pass this chance up and hope for a buck? A shadowy movement at the edge of the woods catches our eye. We shift our gaze and there stands the buck. Still cautious with only his rack and head showing he watches the doe feeding under the tree. Two steps forward and his forequarter comes into view. Apparently satisfied he lowers his rack and steps out into the orchard.

Slowly I raise my bow.







TRAP SHOOTING is one of the most thrilling games in the shooter's life. Good companions help as does a fine over-under shotgun like Charles Teal, of Clarks Summit, has here on the beautiful shooting grounds of Irem Temple Country Club near Dallas.

## The Shooter's Life

By Jim Varner

**A** MORNING duck flight on the marsh, a day with the setters, or a tramp behind the beagles makes one at peace with his surroundings. Add a lunch and a fire, a companion who understands and the sportsman is content. If you have been there you will prepare for the coming season. If not, you have missed one of the real pleasures of life. When you are blue and your nerves are more or less jangled, think this over. There's nothing that equals a day afield with a gun. This month accentuates the call of the outdoors in the breast of all true outdoorsmen. To

all of us, I believe, October is a time of exuberance as day by day the colors deepen; day by day the Master Weaver of nature's intricacies throws his shuttle back and forth. Golds and reds, yellow and orange, browns and purples—the colored strands all combine to weave a carpet that covers our mountain sides and hills, hedgerows and swamp area shrubs and woods. This spectacular pageant lasts for only a few fleeting days, and may go unnoticed by many but to our interested readers I am sure it adds to the store in memories gallery that will bring pleasure as time slides downhill thru autumn.

During the months of August and September our subject was hand-loading. We were more or less engrossed in the mechanics of loading rifle and pistol cartridges and touched only lightly on loading shotgun shells. As



the cooler weather of October approaches, woodchuck hunting is on the wane and most of us will turn our interest to the smooth-bores. No doubt many of you have used your shotgun all summer on crows while others find thrilling recreation at the traps or on the skeet field. These year-around specialists know their smooth-bores from A to Z and I hope they will assist me in endeavoring to pass along some of their "know-how" to the beginner. I certainly am not trying to tell them anything new. Many of these gentlemen belong to N.R.A. Clubs and other Gun Clubs who are doing a good job helping the Game Commissions efforts on Hunting Safety and proper handling of all firearms on the range and afield.

A year ago we discussed quite thoroughly the scatter-gun subject in the October issue. Since then many new subscribers and a number of 'first time out' hunters have joined the camp. Perhaps some of the latter

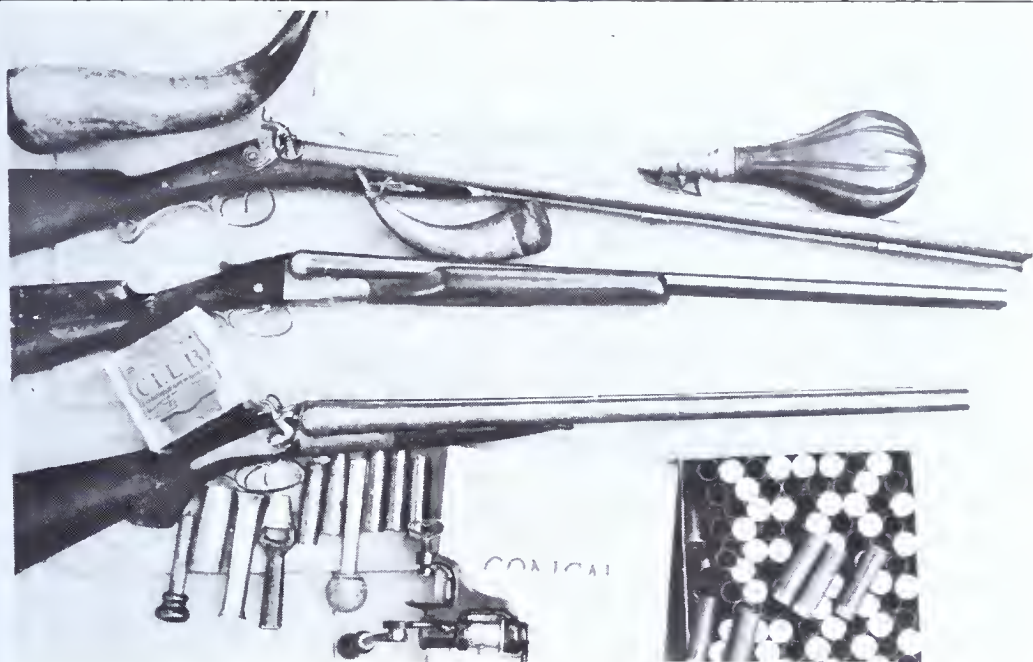
**EXECUTIVE DIRECTOR** Mert Golden of the Game Commission enjoying a round at the traps on the Elysburg Rod and Gun Club.

will appreciate a brief run-down on the guns and loads most favored for the game he seeks. However, before we go farther a few questions and reminders are in order for all. Have you checked the mechanical condition of your gun lately? Do you realize the nearer we approach the small game season, the demand for service from the factory who made your gun as well as the demand for service from your local gunsmith reaches a point where disagreeable delays can happen? A little planning ahead can prevent these delays. Spend a few hours targeting and testing your gun. Don't take anything for granted that may spoil a trip you have looked forward to and which is probably costing considerable. Try a few pattern shots with the shells you prefer. Do this at a distance of not less than 30 yards for open bored guns and small gauge arms and preferably 40 yards with the guns for heavier game like large ducks, ringnecks, turkey, geese and fox. Do not expect a 410 or light 20 gauge load to kill efficiently beyond 30 yards. I am not condemning the 20 gauge shotgun for field use but I certainly feel it is about as light as we need to go. Many of you will disagree here claiming you can do as well with the 28 or 410. The lightest load in the 20 gauge will do anything the smaller ones will do and do it a great deal better. If you doubt this I suggest you test them for pattern and penetration with the same sized shot at 35 to 40 yards. The 20 has the additional advantage of a magnum load with 3 drams of powder and one and one eighth ounces of shot, which gives one light 12 gauge performance. Many shooters believe the small gauge guns throw a narrower pattern than the larger bores, and attribute misses beyond 35 yards to the fact they were not holding close enough. The miss in this case is generally due to a thinned out pattern from an inadequate shot charge.

The bigger the gauge, the narrower







GUNS BRING MEMORIES in the shooter's life. Shown here are the little 5 pound 14 ounce Greener 12, stamped on the rib of which is the inscription "W. W. Greener, St. Mary's Square, Birmingham, England. Winner at all gun trials 1875-1891;" another Greener; and the big 10 gauge Westley Richards under-lever sawed-off buckshot or sheriff's gun for firing maximum charges.

the pattern with a well balanced load. The big ten gauge will outshoot them all. Practically all of the ten gauge magnums made by Ithaca and Parker would easily throw 70 to 80% patterns at 40 yards range. I have never seen many 28 gauge guns and no 410's capable of 70% patterns at 40 yards. To the ones who like these little gauges and own them I will say enjoy them and understand their limited range. They will kill if handled intelligently and for those sensitive to a little recoil, no doubt they fill the bill. They certainly are sad cripples if you are an indiscriminate shooter. On the clay bird they are OK for youngsters to practice coordination and the different leads if you do not shoot at too long range. If you are in the market for your son, daughter or wife's first shotgun select at least the 20 gauge and stick to the light factory load or better still load your own with say two dram equivalent and  $\frac{3}{4}$  oz of 8's or 7½'s. This little load can be used successfully in the 16 gauge also and

increased a  $\frac{1}{2}$  or  $\frac{1}{4}$  dram in light 12's with seven-eighths of an ounce. Increase the shot size to 6's or 5's for hunting and you will be surprised how these little loads perform. A youngster and even ladies who learn to like the shooting game soon outgrow a 28 or lighter gauge, which means another gun later on.

Somehow, I feel the smooth-bore is uppermost in the lives of more shooters than all other firearms combined. It is the oldest type of arm in existence, and while designed for small game it can give a good account of itself with the right projectiles on large game. The very existence of the early pioneer depended more on the smooth-bore for meat on the table than the rifle. Today we consider it more for sport than the game it kills. Talk to any oldtimer about his gun collection and eight out of ten will hand you a fine old 10 or 12 gauge Parker or original Lefever or maybe a well worn Model 97 Winchester and right away become so engrossed in adventures of the past their nos-

talgia may become boresome. How well I remember to the most minute detail some of the thrills I experienced while using the first real shotgun I ever owned, and let me say I have never owned a better one since. My father purchased this Model 1901 Winchester 10 gauge early in 1907 from a neighbor who was timid where recoil was noticeable. It was one with the hinged lever and had 32 inch full choked barrel. Its magazine held 5 of the big two and seven-eighths shells, with one in the barrel it held six. I found the poorly balanced factory shells inadequate for this gun and soon developed hand loads, both black and smokeless that brought out the full efficiency of this grand old gun, the first and only 10 gauge repeater ever produced as well as the only lever action smooth-bore of any importance made. Times were tough then in southern Iowa; game was abundant and no open seasons or bag limits were heard of. We were glad to get fresh wheat and corn fed wild game as needed. None was ever wasted as some non-hunting neighbor was glad to share the kill.

The market hunter with his huge wild-fowl punt gun is gone. Wise game laws have taken over despite tremendous opposition and now 95% of our shooting is on simulated targets. Rapid increases in population, demand for smaller countryside plots and the increase of interest in firearms makes it necessary to restrict the bag limit to a minimum. Live decoys, fast motor-boats and electronic devices are outlawed for migratory fowl. Few real sportsmen shoot for meat anymore and I find as one grows older, the desire to kill game rapidly grows less. Last November, I spent the greatest part of a forenoon working into range of a small flock of Canadians on the Susquehanna River. Crawling like a snake I was within 40 yards of that fine old sentinel gander before he alerted his pals. A model 50 Winchester auto, Cutts equipped with the long-range

680 tube and 4 drams equivalent and 1½ ounces of copper plated two took the life out of him before he was four feet off the sand bar and one of his pals laid only ten steps beyond. The other three birds circled above for at least 20 minutes giving vent to their distress with wild plaintive calls. They couldn't understand why the dead ones on the sand bar did not respond. I could have easily killed all five. They probably had been together all the way down from James Bay. The old 'sentinel' had made the trip many times as he was old and tough. I picked up the two magnificent birds (the days legal limit) and started the return over the trail I had so laboriously crawled to get in range. Was I proud? Not exactly. I had brought to an end the lives of two real 'free-booters' whose thrilling calls and high airborne flight thrills all who know enough to understand. No doubt I will accept the challenge and try to bag others of this species but from now on most of the shooting will be done with the 16mm Bolex and its 152mm telephoto lens.

Before the motion for adjournment becomes effective a word on the correct shot sizes for the game he seeks will be suggested. For upland game such as woodcock, rail, doves, snipes and small pests light loads of 7½, 8 and 9's will fill the bill. 9's are OK for skeet and that is about all. 7½'s and 8's are best for trap. Grouse, rabbit and squirrel will take light to medium loads of 8, 7½, 6, 5 and 4's in the order named. Personally, I prefer the 22 rifle for strictly squirrel hunting. For wildfowl, ducks over decoys, 4, 5, and 6's in medium loads; all other duck shooting 5, 4's and even 2's in the express loads. Geese, Turkey and Fox require express or Magnum's in 4, 2, and BB's. However remember, its not how often you shoot, but how well you shoot. Most any load and gun combination will fill the bag if used intelligently.





# OUTDOOR FUN WITH A FUTURE



## Get Started Right

By Ted S. Pettit

**L**IKE shooting, getting to know ducks takes practice. Looking at pictures in books is a help, but nothing can take place of watching a live bird in flight. Books usually emphasize color or some other field identification mark. But in early morning light, with the rising sun in your face—or just before the closing hour looking into the sunset, color means nothing. All you see is a silhouette. What counts most is that silhouette plus the way the bird flies. Sometimes the call notes are important too. But it takes practice, practice and more practice to know ducks in flight in all kinds of light and under the varied conditions that anyone comes up against in the course of a season's shooting.

### Judging Range

Judging range is probably the most difficult part of shooting for the beginner as well as the occasional shooter. But there is one good way of practicing.

Use some heavy cardboard, plywood or composition board and sketch some crude, life-size silhouettes of ducks in flight. They don't have to be fancy—it's the size and approximate shape that counts. Then fasten small inexpensive pulleys to these silhouettes. Stretch a piece of wire or cord from a tree or pole to a stake

in the ground forty yards away. Fasten the silhouette to the wire and with a friend to release it, watch the silhouette as it slides down the wire. Stand thirty, forty and fifty yards away.

Make absolutely sure your gun is empty—then follow the silhouette so that you get an idea of size over the barrel of the gun. Try this with the "bird" flying toward you, away from

BOY'S FIRST GUN should be selected with care. Then the young shooter should be carefully trained and coached in safe gun handling and correct stance, aim and shooting methods.



you, and at angles. Don't just try it once, but try it often at known distances, so that the size pattern becomes fixed in your mind, and you become conditioned to shooting only with a thirty or forty yard range.

Clean kills and no cripples are the mark of the true sportsman who thinks enough of his sport to practice well ahead of time.

### Try Trap for Practice

An inexpensive hand trap, a case or two of clay birds and four or five boxes of trap load shells are the makings for some good practice shooting. Of course it will take someone to throw the birds, and the more skilled that person is, the better. For with a hand trap and a little practice using it, you can duplicate about any wing shot you'll face in field or marsh.

This kind of shooting also provides excellent practice in two old bugaboos of the occasional or "few times a year" shooter—lead and follow through.

Probably the most difficult shot for the beginner or once-in-a-while hunter is the duck going down wind directly past the blind just about at the limit of the range. How much do you lead it?

Here's a way to practice this shot, but it takes some protection for the fellow who handles the hand trap. Build such protection out of  $\frac{1}{2}$ " plywood or tempered wall board. Not much more than a 4' x 8" (upright) shield is necessary. The thrower stands behind the shield and the shooter stands forty yards away so that the clay bird flies at right angles (in either direction) to his position. Low, fast flights, medium high fast flights, and slow, sailing flights of clay birds all provide excellent shooting practice. How much "lead" to allow, and the importance of follow through become quickly evident.

### Tips for Beginners

Take it from one who learned the

hard way. It's much easier to become a good shooter if you get started right than to learn by trial and error. When you teach yourself to shoot, you're likely to pick up bad habits without knowing it. Then the more you shoot, the more these bad habits become part of you, and it may take years to get over them. It's much more difficult to "unlearn" the wrong way to handle a gun than you would ever imagine. Get started right, with the correct form and shooting skills, and maybe you won't take any prizes at Camp Perry, but you will hit what you aim at with a reasonable degree of regularity. Then, the more you practice, the better you become.

Most beginners start with a 22 caliber rifle. First they have trouble holding the rifle steady, and as a result they have more trouble learning

HAND TRAP PRACTICE is fun and it's an excellent way to learn proficiency with the shotgun. A skilled person with a hand trap can duplicate about any wing shot you'll face in the field or marsh.





how to sight and learning how to squeeze rather than jerk the trigger. The first step, probably, is to know ahead of time what the pattern of rear sight, front sight, and target should look like. The National Rifle Association and the Sporting Arms and Ammunition Manufacturers Institute both publish booklets and charts that clearly show this pattern.

The next step is shoot from a prone position and using a sling. Thus, the rifle is steady and it is much easier to learn proper sighting. When these two important techniques are coordinated, then it is easier to learn to squeeze the trigger.

Since most beginning shooters start with a rifle on a range at stationary targets, when they take up the shotgun, they try to use the same technique as with the rifle, and they have more problems. First, a shotgun target is not stationary—it is moving, so you cannot hold the gun steady. Next, you must point the shotgun rather than aim it, and last, if you squeeze the trigger as you do with a rifle, the clay bird or feathered one will be out of range or on the ground before you shoot. With a shotgun, too, you must “follow through” after the shot, which is not as necessary in shooting at a stationary rifle target.

It may seem that it is easy to read about how to shoot, then go out and do it. Thousands of people have learned to shoot that way, but it's the hard way.

It is better to find a good coach or instructor who can show you the fundamentals, and then watch you while you shoot. He can point out mistakes which you could not catch by yourself and save you the added problem of having to correct a long

practiced bad habit.

There are several ways to find a good shooting instructor. Perhaps your local gun club or conservation club has classes for beginners. Ask your local state conservation officer or the outdoor editor of your local or county newspaper for a lead on such classes. Your local Sporting Goods Shop may provide help too.

Many American Legion Posts and other veterans organizations have rifle ranges. Some schools have shooting programs, and many town, city, or county recreational commissions have ranges and classes.

Most Boy Scout camps, many private camps, and special state conservation camps have shooting as part of their program. Most of these camps at least have a rifle range, but many have 22 caliber trap shooting instructions and even large caliber shotgun programs. The advantage of attending one of these camps is that you shoot one hour or so a day for a week or more and thus in a week you get the equivalent of several weekly classes.

Finally, there are special “schools” that specialize in training beginners in shooting. Some are operated by private shooting preserves, hunting lodges and large sporting goods stores. Some are independent, and their only purpose is to teach you how to shoot. But in any community in the country, a few telephone calls, or a letter or two will turn up a source of instruction. Don't necessarily look for the best shot as your teacher. Some of the best instructors are good shots, but not spectacular. But, they are good teachers. There's a big difference.



# Annual Questions on Fox Trapping

By Larry J. Kopp

**Q.** Which is the most difficult to trap—red or gray fox?

**A.** The red fox is generally more challenging than the gray fox. There is very little difference insofar as sense of smell is concerned—the gray fox can detect an unclean trap or foreign odor just as easily as a red fox, and often avoids your sets as carefully as red foxes do. However, the main distinction between the two species, is that gray foxes have a more defined sense of curiosity, all of which gets them into a lot of trouble

and into your traps. The red fox, too, has a sense of curiosity. But it is exceptionally timid, a characteristic which is usually more influential than its sense of curiosity. In other words, the gray fox can be expected to throw all caution to the wind when it gets a sniff of your bait—the red fox thinks twice! Another reason why gray foxes are easier to catch, is that they have a voracious appetite. The red fox has a hearty appetite, of course, but it generally eats only when hungry, while the gray fox often eats simply because food is handy, regardless of whether it is hungry or not!

**Q.** When I catch a fox, is it alright to reset the same trap or should I set a clean one?

**A.** Since a trap which has caught an animal tends to rust, it is always





best to remake your set and use a clean trap.

**Q. I have heard that it is better to take a live fox some distance away from a set to kill it—is this true?**

**A.** No. Learn the correct method of killing trapped foxes without drawing blood. However, if you elect to shoot foxes, it is unquestionably a better plan to do the job as far away from your set as possible.

**Q. After remaking a set from which a fox has been taken, is it necessary to add lure or urine?**

**A.** Only if the fox was caught during rainy weather. If weather conditions are dry, the urine and droppings which a trapped fox deposits at your set, does more to attract others than your commercial lure.

**Q. Since foxes seldom eat the bait at dirt hole sets, should I leave the same bait all season?**

**A.** Commercial fox bait is treated so as to retain its odor for several weeks under fair weather conditions. Rain, of course, dilutes it. Therefore, fox bait should be replaced after heavy rains.

**Q. Is it better to use only one kind of fox lure on my trapline?**

**A.** If you are inexperienced, your best plan would be to try at least two, possibly three different makes of fox lure. Keep an accurate record of your sets and the kind of lure you use at each one. At the end of the season your record should give you some idea of which kind of foxes in your area prefer. Once you learn which make of lure attracts the most foxes—use it exclusively. Remember that foxes are somewhat like people: Everybody is attracted to ice cream, but the majority of folks prefer vanilla!

**Q. Should I also try different kinds of fox bait or urine?**

**A.** No. Fox urine is sometimes weakened with water to gain quantity, but even so, it serves its purpose relatively well. As for bait, the best plan is to buy it from your nearest

dealer or make your own. Since bait really serves only to get a visiting fox into a "digging-mood," after the more powerful lure has attracted the animal, its odor is of little importance. In fact, many trappers agree that foxes are just as easy to catch if no bait at all is used.

**Q. When I inspect my fox sets, how far should I stay away?**

**A.** You should not stay away at all. Approach your fox sets from whatever direction is most convenient and go just as close as is necessary to make sure that the trap has not been disturbed. A partially uncovered trap does more to alarm foxes than your path leading to the set. For that matter, if your trap is clean and your set properly made, a path leading to it can be just as much of a guide to the fox as your lure. Remember a fox does not think—it merely has an acute sense of smell.

**Q. Can I expect to catch more foxes if I make a variety of sets?**

**A.** Take a hint from the farmer: He plants a variety of crops—if one fails, another may prove profitable. In fox trapping, the general idea is to set traps where you find signs, or in areas where foxes are likely to hunt for food. Naturally, if there is no logical location for a dirt hole set, try making a scent post set. On the other hand, if there is a stream nearby, make a stepping stone set. Some veteran trappers have developed an intriguing system: In order to apply the theory: Variety is the spice of life—they make dirt hole sets almost exclusively during the first half of their trapping season. When they feel that foxes are getting too familiar with the plan, they switch over to scent post or water (stepping stone) sets.

Another plan favored by some trappers, is to keep right on specializing in dirt hole sets, but setting traps at only half of the sites. In other words, make two or three trapsites in a field and space them a few hundred yards apart, then set a trap at one of them.



## Why Farms May Be Posted

Dear Sir:

During the last three or four years I have read many editorials and articles emphasizing the need for more courtesy and consideration on the part of hunters for the property and peace of mind of farmers. The conclusion often drawn has been that carelessness, discourtesy and lack of consideration result directly in the posting of farms against hunting. This conclusion may be valid, but it is a great over-simplification of the problem.

Nearly all farmers have had unpleasant experiences involving littered lanes and roadsides, damaged fences, signs used for targets—even injured livestock. Naturally such things get under the farmer's skin but they are not the only, or even the chief, reason why farms in this area are posted.

One important reason is that there is but little game in proportion to the number of would-be hunters. The approximate bag on our place last season consisted of 4 cock pheasants, 20 rabbits, 12 squirrels and 1 deer, a total of 37 animals. The number of hunter-days was about 40. The four pheasants amounted to a clean sweep of the cocks. Probably half of the rabbits and squirrels survived as did a fair number of deer (possibly too many). Not a very big bag per hunter.

Two families live on our farm and we, quite naturally, have plenty of relatives and friends who are eager to hunt here. We welcome them but, quite frankly, our welcome would be more enthusiastic if *just one* of them took a little interest in the place in the non-hunting season. How nice it

would be if occasionally someone would show up on a July afternoon and offer to help for half a day with the baling or combining (Saturdays and Sundays included) or with mending fences in March. Where are all the hunters then? Even if someone with enlightened self-interest volunteered to build and tend a feeder for pheasants or squirrels or to plant some berry-bearing shrubs we'd faint dead away!

Now these are people that we know and like. They are careful and, generally, courteous. For every one of these there are twenty others patrolling the roads, people of unknown experience and responsibility, looking for an unposted farm.

I myself have had a couple of heart attacks, yet I like to get out on a pleasant day in season with some chance of finding a pheasant or a rabbit.

Are we, then, unreasonable if we post our farm and restrict the hunting privilege to those who have some connection, however remote, with its maintenance as a farm and, to a limited extent, as a place where small game can find food, water and cover?

So much for small game. When it comes to deer, I can only say that within 200 yards of the perimeter of our farm are 15 houses, several of them within 50 yards and only four of them visible from the open fields. In addition, a state road cuts through the place and a township road bounds it on two sides. Is it unreasonable for us to post the farm and restrict the privilege of deer hunting to a few individuals who are not only careful and considerate but who are also



thoroughly familiar with the topography and the exact location of all those unseen houses and the fact that they are inhabited in winter as well as summer?

I do not mean to belittle in any way your efforts to instill ideas of consideration and safety into otherwise thoughtless people. I do believe, however, you should also point out that there are other valid reasons for

restricting the hunting privilege and that sometimes the farmer or owner is, without being anti-social, best qualified to judge what the limitations should be. Posting is not necessarily the result of abuse. It is the farmer's *only* means of exercising this judgment.

Very truly yours,  
Carroll R. Williams, Jr.  
New Hope, Pa.

## PENNSYLVANIA

### SUNRISE-SUNSET TABLE

The following times of sunrise and sunset are based on the 77th Meridian which runs north and south through Eastern Adams County, Harrisburg Airport, Williamsport and Eastern Tioga County. Times shown are EASTERN STANDARD TIME.

Hunters in localities east or west of the 77th Meridian should note that there is a considerable variation in sunrise-sunset times from those shown before (as much as 8 minutes earlier in Philadelphia and 12 minutes later in Pittsburgh). Check your local weather station for correct information.

Date	September		October		November		December	
	Sunrise	Sunset	Sunrise	Sunset	Sunrise	Sunset	Sunrise	Sunset
1 .....	5:34	6:39	6:03	5:50	6:36	5:05	7:10	4:42
2 .....	5:35	6:37	6:04	5:48	6:37	5:04	7:11	4:41
3 .....	5:36	6:36	6:05	5:47	6:38	5:03	7:12	4:41
4 .....	5:37	6:34	6:06	5:45	6:39	5:02	7:13	4:41
5 .....	5:38	6:33	6:07	5:43	6:40	5:00	7:14	4:41
6 .....	5:39	6:31	6:08	5:42	6:42	4:59	7:15	4:41
7 .....	5:40	6:29	6:09	5:40	6:43	4:58	7:16	4:41
8 .....	5:41	6:28	6:10	5:39	6:44	4:57	7:17	4:41
9 .....	5:42	6:26	6:11	5:37	6:45	4:56	7:18	4:41
10 .....	5:43	6:25	6:12	5:36	6:46	4:55	7:19	4:41
11 .....	5:44	6:23	6:13	5:34	6:47	4:54	7:20	4:41
12 .....	5:45	6:21	6:14	5:33	6:49	4:53	7:20	4:41
13 .....	5:46	6:20	6:15	5:31	6:50	4:52	7:21	4:41
14 .....	5:47	6:18	6:16	5:30	6:51	4:52	7:22	4:41
15 .....	5:48	6:16	6:17	5:28	6:52	4:51	7:23	4:42
16 .....	5:49	6:15	6:18	5:27	6:53	4:50	7:23	4:42
17 .....	5:49	6:13	6:19	5:25	6:55	4:49	7:24	4:42
18 .....	5:50	6:11	6:20	5:24	6:56	4:48	7:25	4:43
19 .....	5:51	6:10	6:21	5:22	6:57	4:48	7:25	4:43
20 .....	5:52	6:08	6:22	5:21	6:58	4:47	7:26	4:43
21 .....	5:53	6:06	6:24	5:19	6:59	4:46	7:26	4:44
22 .....	5:54	6:05	6:25	5:18	7:00	4:46	7:26	4:44
23 .....	5:55	6:03	6:26	5:17	7:02	4:45	7:27	4:45
24 .....	5:56	6:01	6:27	5:15	7:03	4:45	7:27	4:45
25 .....	5:57	6:00	6:28	5:14	7:04	4:44	7:28	4:46
26 .....	5:58	5:58	6:29	5:13	7:05	4:44	7:28	4:47
27 .....	5:59	5:56	6:30	5:11	7:06	4:43	7:28	4:47
28 .....	6:00	5:55	6:31	5:10	7:07	4:43	7:29	4:48
29 .....	6:01	5:53	6:32	5:09	7:08	4:42	7:29	4:49
30 .....	6:02	5:52	6:33	5:07	7:09	4:42	7:30	4:50
31 .....	....	....	6:35	5:06	....	....	7:30	4:50

**LEGAL SHOOTING DAYS AND HOURS—SUNDAYS EXCEPTED**  
*Unlawful to hunt for any wild bird or animal, including migratory game, on October 31, 1959 prior to 8:00 A.M., EST. or on October 24, prior to 12 o'clock Noon EST. (Except deer with bow and arrow).*

SPECIES	FIRST DAY	OPEN SEASONS	LAST DAY	DAILY BAG LIMITS	MAXIMUM POSSESSION LIMITS	LEGAL SHOOTING DAYS AND HOURS—SUNDAYS EXCEPTED
Sora; Rails;						
Gallinules	Sept. 1	Nov. 9		15	30	Sept. 1 to Nov. 9
Woodcock	Oct. 15	Nov. 23		4	8	Oct. 15 to Nov. 23
Wilson's or						1½ hr. before sunrise to sunset
Jacksnipe	Oct. 24	Nov. 21		8	8	1½ hr. before sunrise to sunset
Doves	Sept. 1	Nov. 4		10	20	sunrise to sunset (except Oct. 24)
						12:00 o'clock Noon to sunset

**NO FEDERAL STAMP REQUIRED TO HUNT SORA, RAILS, GALLINULES, WOODCOCK, JACKSNIPES AND DOVES; STAMP REQUIRED TO HUNT DUCKS, GEESE, COOTS, AND BRANT.**

Ducks	Oct. 24	Dec. 12	3	6	Oct. 26 to Dec. 12	sunrise to sunset
(Daily bag limit may include 1 wood duck; possession limit 1.)					Oct. 24 only	12:00 o'clock Noon to sunset
(Daily bag and possession limits may include 1 hooded merganser.)					Oct. 31 only	8:00 A.M., EST. to sunset
(Daily bag limit and possession limit may not include more than 1 canvasback, or 1 redhead, or 1 ruddy duck.)					NOTE: In the Counties of Bucks, Philadelphia and Delaware, and on the Delaware River bordering such counties, the waterfowl season shall be:	
Mergansers (American and Red-breasted)	Oct. 24	Dec. 12	5	10 (not	First Day	Daily Possession Limit
to be counted in daily bag and possession limits on other ducks)					Geese	Bag Limit
Geese (except Snow)	Oct. 24	Dec. 12	2	4	(except Snow)	Oct. 24 Dec. 22
Coots	Oct. 24	Dec. 12	3	6	Brant	Oct. 24 Dec. 22
Brant	Oct. 24	Dec. 12	6	6	Ducks*	Nov. 14 Dec. 23
					Coots	Nov. 14 Dec. 23
					Jacksnipe	Nov. 14 Dec. 12
					(*See opposite column for restricted daily and possession limits.)	

#### MIGRATORY BIRD HUNTING METHODS

**Permitted:** Bow and arrow, or shotgun not larger than 10-gauge, fired from shoulder (including hand-operated and semi-automatic repeating shotgun of not more than 3-shell capacity, which must be plugged to 3 shots so that plug cannot be removed without disassembling the gun); dog; blind; boat propelled by hand; floating device other than sinkbox; artificial waterfowl decoys. Injured or dead waterfowl may be picked up by means of a motorboat; sailboat or other craft. Shooting is permitted from a boat or other craft having a motor attached if such craft is fastened within or tied immediately alongside of any type of stationary hunting blind.

**Prohibited:** Use of electrical devices or recordings in taking migratory game birds; all rifles; live bird decoys; automobile; aircraft; sinkbox (battery); power boat, sailboat, or any device towed by power boat or sailboat. Waterfowl, coot, gallinules and doves may not be taken under any circumstances by the aid of salt, or shelled or shucked or unshucked corn, wheat, or other grains, or other feed or means of feeding similarly used to lure, attract, or entice such birds to, on, or over the area where hunters are

means of feeding similarly used," shall not be construed as including salt blocks, properly shocked grain, standing crops (including aquatics), flooded standing crops, flooded harvested crop lands, or, in connection with the hunting of waterfowl, coots and gallinules, grains found scattered solely as a result of normal agricultural practices, or, in connection with the hunting of doves, grains found scattered solely as a result of normal agricultural harvesting. Waterfowl may not be hunted by means, aid or use of cattle, horses or mules and no motor-driven land, water or air conveyance or sailboat may be used to concentrate, drive, rally or stir up waterfowl or coots.

#### FEDERAL STAMP FOR MIGRATORY BIRD HUNTING

It is unlawful for a person over the age of 16 years to take migratory waterfowl unless he carries on his person an unexpired Federal Migratory Bird-hunting Stamp, validated by his signature written in ink across its face. Not valid after June 30 following date of issue. This stamp is not required to hunt Sora, Rails, Gallinules, Woodcock, Wilson's or Jacksnipe



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STATE WILD TURKEY FARM—Leon P. Keiser, Superintendent, Proctor Star Route, Williamsport. Phone: Loyalsock 8-2369

SOUTHWEST GAME FARM—Clarence Wilkinson, Superintendent, Box 105, Distant. Phone: ULrich 9-2641

# Pennsylvania Official 1959 Open Seasons and Bag Limits

(Regulations apply for Hunting License Year, September 1, 1959 to August 31, 1960)

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 31 will be 8:00 A. M., EST. On other opening days, and otherwise during the season for upland and big game, the shooting hours daily are from 7:00 A. M. to 5:00 P. M., EST, excepting from July 1 to September 30, inclusive, 6:00 A. M. to 7:30 P. M., EST, and the hours for the October archers' deer season, which are 6:00 A. M., to 5:30 P. M., EST. (FEDERAL REGULATIONS FOR SEASONS, BAG LIMITS AND GENERAL SHOOTING HOURS ON MIGRATORY GAME BIRDS WILL BE ANNOUNCED LATER.)

	BAG LIMITS		OPEN SEASONS	
	Day	Season	First Day	Last Day
<b>UPLAND GAME</b> (Small game possession limits below)				
Ruffed Grouse .....	2	8	Oct. 31	Nov. 28
Wild Turkeys (see below certain counties closed)*	1	1	Oct. 31	Nov. 21
Squirrels, Gray, Black & Fox (combined) .....	6	30	Oct. 31	Nov. 28
Ring-necked Pheasants, males only .....	2	8	Oct. 31	Nov. 28
Rabbits, Cottontail .....	4	20	Oct. 31	Nov. 28 AND
Rabbits, Cottontail .. (not more than 20 in combined seasons) .....			Dec. 26	Jan. 2, 1960
Bobwhite Quail .....	4	12	Oct. 31	Nov. 28
Hares (Snowshoe Rabbits) .....	2	6	Dec. 26	Jan. 2, 1960
Raccoons (hunting or trapping) .....	Unlimited		No Close Season	
Woodchucks (Groundhogs) .....	Unlimited		No Close Season	
Squirrels, Red (closed October 1 to 30, inclusive) .....	Unlimited		No Close Season	
Bears, over one year old, by individual .....	1	1	Nov. 23	Nov. 28
Bears, as above, by hunting party of three or more .....	2	2	Nov. 23	Nov. 28
<b>DEER:</b>				
<b>Bow and Arrow Season</b> —Any sex, regardless of size. (Requires Hunting License and Archery License, but no Antlerless Deer License) .....		(only one deer for combined seasons)	Oct. 3	Oct. 30
			Nov. 30	Dec. 12
<b>ANTLERED DEER</b> —Regular Season—Male with two or more points to one antler: Provided, a male deer with an antler three or more inches long without points, measuring from the top of the skull as the deer is in life, shall be considered legal, by individual .....		1	1	
<b>ANTLERLESS DEER SEASON</b> —(Requires Hunting License and Antlerless Deer License), by individual .....				Dec. 14, 15 and 16
<b>NO OPEN SEASON</b> —Hungarian Partridges, Hen Pheasants, Sharp-tailed Grouse, Cub Bears, Elk, Otters.				
<b>FURBEARERS:</b>				
Skunks and Opossums .....	Unlimited		No Close Season	
Minks .....	Unlimited		Nov. 21	Jan. 16, 1960
Muskrats (traps only) .....	Unlimited		Nov. 21	Jan. 16, 1960
Muskrats (traps only) .....	Unlimited AND		Feb. 13	Mar. 19, 1960
Beavers (traps only) state-wide .....	5	5	Feb. 13	Mar. 19, 1960

## SPECIAL REGULATIONS

**TURKEYS—COUNTIES CLOSED**—\*Adams, Cumberland, Perry, York and that part of Franklin south and east of U. S. Route 11.

**POSSESSION AND TRANSPORTATION LIMITS** of legally-killed small game shall mean not more than the daily limit for the first day nor more than an accumulated total for each succeeding day of the open season for each species; but not in excess of the season limit, regardless of where held, stored or found in possession.

**DEER**—Even though there are three separate seasons for taking deer, a hunter may not kill more than one deer during the three 1959 seasons, whether hunting individually or with a camp or hunting party. An Archery License is required during Bow and Arrow Season, issued only by County Treasurers at a fee of \$2.15, and the Department of Revenue, Harrisburg, at a fee of \$2.00. Antlerless Deer Licenses are issued only by County Treasurers at a fee of \$1.15, and valid only in the county for which issued. Farm occupants may hunt for deer during the Archery Season, as well as the Antlerless Deer Season, without a license on lands resided upon, or those immediately adjacent with the written consent of the owner or lessee. Under the law, no application for an Antlerless Deer License shall be approved, or license issued, to a nonresident prior to November 14, or after December 13, 1959.

**BEAVERS**—No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to the Game Protector in District or County where trapped.

**TRAPPING**—Traps for furbearers not to be placed, staked or set before 7:00 A.M. on the first day of open seasons. The season indicated for Trapping closes at 12:00 o'clock Noon on last day. Traps must be tagged with metal name tags.

**SNARES**—The use of snares is prohibited in all counties except by special permit.



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# PENNSYLVANIA GAME NEWS

NOVEMBER, 1959

TEN CENTS



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DOCUMENTS SECTION

NED SMITH





## THE STORY BEHIND THE COVER

**SURPRISE!** The trails of the hunted and the hunter have finally crossed. But if the hunter had any choice in the matter, he would prefer that they meet at another time under more favorable circumstances. By the time he spills the rest of the coffee in his lap, bites his tongue in getting rid of that sandwich, and gets his rifle to his shoulder, the black bear will be long gone.

And there's the rub in bear hunting. It's probably the most challenging but least publicized sport in Pennsylvania—an annual test between human intelligence and animal cunning. Yet through it all there runs a string of luck. Our crimson-clad nimrod on this month's cover is suddenly finding his is not good.

Of course, the very fact that he has, at long last, come face to face with his quarry is a stroke of rare good fortune. Thousands of his brother hunters faithfully take to the woods each November in bear season; only a comparative few even so much as see a black bear. Bruin is unquestionably the most elusive trophy Penn's woods has to offer.

Pennsylvanians have long recognized the sporting qualities in this big game animal. It was the first state to enact legislation protecting black bears (in 1905) and it has carefully guarded the bruin population ever since. The result has been an annual harvest of between 300 and 600 bears for the past fifty years. The largest take of black bears in Pennsylvania was a harvest of 929 in 1924. Bear cubs were first protected in 1925 and the kill has never come close to that figure since.

Why so much interest in bears? Perhaps it is because, from the time we first hear about Goldilocks and her three bears, the big beast has caused some sensation of fear in us. Of all the wild creatures, the bear seems to be the one most likely to overcome us if we had to face him on even terms. He is big (and he always looks at least twice his actual size when we meet him in the woods), he is terribly strong and he is mysterious. The truth, however, is that the bear is deathly afraid of humans (except for the semi-tame, park dump kind), his eyesight is quite poor, and he feeds almost entirely on fruits, berries, insects and vegetation.

Even so, the hunter on this month's cover is not only surprised; he is undoubtedly plenty scared. He is in no danger and the black bear is about to make a bee-line disappearance. But for Pennsylvania's thousands of bear hunters and for all her citizens, the sight of the black bear—biggest and best trophy of them all—is always a surprise, a scare and a thrill. With proper protection and management, the black bear will continue to provide such experiences and there will always be hunting scenes like this each autumn.



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Pennsylvania Game Commission  
Commonwealth of Pennsylvania  
DAVID L. LAWRENCE, *Governor*

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By Ned Smith

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Editorial . . .

## One More Answer

Many Pennsylvanians will experience a new kind of hunting this year—a form of their favorite sport which is a distinct change from the old concept of public hunting. At Quehanna, Indiantown Gap, Letterkenny and other places, hundreds of hunters will have to register, receive permits, be told where they can hunt and in what numbers. In short, this is controlled hunting.

The change may come as a shock and surprise to those who still think that public hunting implies complete freedom of movement and action. But to those sportsmen who seek their game on these areas, the controls will prove to be a blessing in disguise.

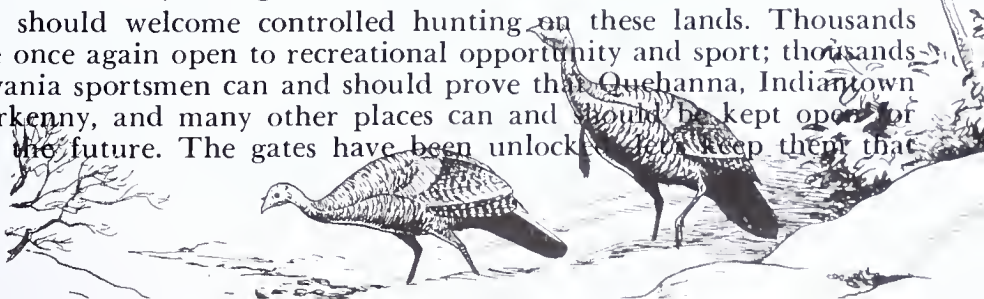
Most of these areas have in the past been closed to hunting of any kind. The mere fact that these thousands of acres will be open to recreational opportunity should be cause for rejoicing. And the simple controls imposed will insure those lucky enough to hunt on these lands maximum safety, a fair chance at the game, and a golden opportunity to prove that most hunters are welcome guests.

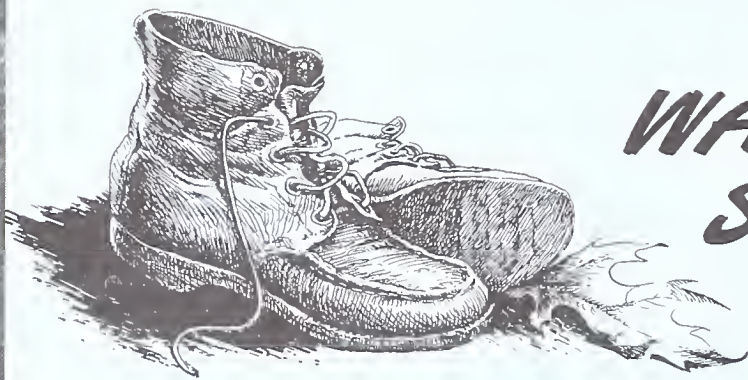
It is a tribute to the Curtiss Wright Corporation, the U. S. Army and Government, and to other private industries and concerns that they have recognized a public need and democratic responsibility. It is, at the same time, a challenge to Pennsylvania sportsmen that they prove beyond a shadow of doubt that hunting is a safe, healthy and courteous sport.

In mid-century, it should be perfectly obvious to everyone that recreational demands are rapidly exceeding supplies of recreational lands. Every step towards opening lands and waters, either public or privately owned, is a step in the right direction—one more answer to a most difficult problem.

There is no longer any room for the careless or discourteous or selfish hunter. Controlled hunting can provide a means of discouraging and eliminating the "slob" hunter yet at the same time insuring an adequate harvest of the wildlife crop. The system thus becomes mutually beneficial, doubly advantageous. The landowner obtains some degree of control over wildlife species, particularly deer, which can cause damage to the property. The sportsman can enjoy hunting under uncrowded conditions which insure a greater degree of safety and greater chances of success in the hunt.

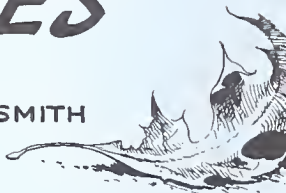
Everyone should welcome controlled hunting on these lands. Thousands of acres are once again open to recreational opportunity and sport; thousands of Pennsylvania sportsmen can and should prove that Quehanna, Indiantown Gap, Letterkenny, and many other places can and should be kept open for hunting in the future. The gates have been unlocked. Let's keep them that way!





# WALKIN' SHOES

By NED SMITH



## Humphrey Of The Hills

1. During what season of the year are bear cubs born?
2. The black bear has exceptionally keen eyesight. True or false?
3. About how many bears are killed in Pennsylvania each year?
4. Why is the feeding of bears discouraged in our public parks?
5. Bears are fond of insects. True or false?
6. Hikers would be wise to carry side arms when walking through black bear country. True or false?
7. How does the average male bear's winter "den" differ from that of the female's?
8. Do driven black bears use certain crossings as deer do?

WHILE poking along a woodland path in Cameron County one afternoon I came upon a row of spruce trees that had been planted by the owners of a nearby hunting camp. One tree, standing a little out of line, had apparently been attracting the attention of passing black bears for some years. Its bark bore a grand collection of claw marks of various vintages and a head-high patch on the east side of the tree was bitten and chewed a third of the way through the trunk. This was a "bear tree," the purpose of which has always stimulated speculation among woodsmen and hunters. Some claim they are

yardsticks on which the bear measures his height each year. Others believe they are made by a male blackie to warn other bears to keep out of his territory. According to this theory smaller passers-by take the hint and skedaddle, but a he-bear that can place his mark higher on the trunk automatically becomes the new boss of the trail. Still others consider them a sort of "register book" like the scent post of the fox. Whatever the purpose the scarred tree tells us we are in bear country and this discovery alone adds spice to our outdoor ramblings.

That there are wild bears in a highly industrialized and densely populated state like Pennsylvania is a surprise to many folks, although hunters who are familiar with the vast forested regions of our northern counties have long known of this great game animal. In recent years the black bear has been pursued nearly as avidly as the deer and the average yearly take is almost four hundred animals.

Few creatures have been so unjustly maligned as the inoffensive black bear. Actually he is the Humphrey Pennyworth of the animal world—a lumbering hulk of a beast possessing the strength of a bulldozer and the blood lust of a rabbit. The potential for danger is there, all right. His





HELLO,  
DOWN THERE!



WHAT DO YOU DO  
FOR TIRED BLOOD?

REACH AS  
IS HE CAN.

HOULD BE SOME  
TS UNDER HERE.



WHO'S THAT SNEAKING INTO  
MY HUCKLEBERRY PATCH?



BEAR HUNTERS!!  
LEMME OUTA HERE!

NED  
SMITH



great forearms can break a deer's neck with one blow and his steely claws can reduce a stump to splinters, but he not only hasn't the inclination to rough up humans, he's scared to death of them! Under only a few circumstances are black bears considered dangerous. A badly wounded bear or a female with cubs should be treated with the utmost respect. Perhaps the most dangerous of all are the half-tame bruins of our public parks.

In a wild state the black bear is a harmless and amusing fellow, often referred to as the "Clown of the Woods." Unfortunately he is cursed with a small boy's penchant for getting into mischief. Game protectors are frequently harassed by certain bears who make a game of batting metal refuge signs into unrecognizable wads of crumpled tin or chewing wooden signs to pieces. Any object that attracts their attention is likely to be walloped or bitten. Hunger gives added stimulus to their normal propensity for destruction. unoccu-

pied hunting cabins exuding odors of ham or jelly are in imminent danger of having their doors ripped off the hinges. Once inside, it doesn't take Bruin long to locate and sample everything edible—plus alarm clocks, fly swatters, and other objects not usually considered food.

Practically anything is natural food for the black bear. Blueberries, blackberries, juneberries, wild cherries, acorns, mushrooms, and wild grapes are avidly devoured, as are various roots and tubers. Honey is so irresistible a bear will gladly tear a tree apart to get at it. Grasshoppers, grubs, and beetles are considered tasty, too. Then there are ants. What satisfaction the big oaf derives from these infinitesimal crawlers is more than I can understand, but he'll go to any lengths to lap up a few—overturning rocks, ripping apart rotten logs, or stirring into the seething heart of ant hills. He is just as passionately fond of beechnuts. Small mammals are eaten whenever they



can be caught. A bear will sometimes acquire a taste for domestic honey, pigs, sheep, or green field corn. When this happens the only permanent solution is to trap the culprit and release him far from such temptations.

Wintertime hibernation puts an end to Bruin's activities. At the approach of cold weather the female selects a snug snoozing place in a hollow log, a shallow cave, a cavity under a stump or boulder, or some similar retreat. There she curls up for the winter on a bed of leaves, fortified and insulated by the autumn's accumulation of fat beneath her hide. The male is seldom so choosy about shelter. He often beds down in a shallow, open depression and depends upon a heavy snowfall for a comforter.

Bears are not true hibernators in the sense that the chipmunk and groundhog are. The latter animals spend the cold months in complete torpidity. The bear, on the other hand, is a light and restless sleeper. He is easily aroused, and the males in particular sometimes change sleeping quarters in the middle of winter.

The cubs are born in hibernation. Numbering one to four they are remarkably small at birth, weighing between six and twelve ounces and averaging about eight inches in length. Unbelievable as it seems, newborn black bears are smaller than new-born porcupines.

With the coming of warmer weather the sow and her cubs leave their winter quarters and the youngsters, now weighing seven or eight pounds, immediately begin learning about their wondrous forest home. Mamma Bear is an adoring mother but she rules her family with an iron paw. Disobedience simply is not tolerated, and the cub that thinks he's his own boss soon has more sensible ideas pounded into his furry little head.

Bear cubs are the most comical little creatures imaginable. Forever on

the move, their daily schedule includes wrestling and ear-biting matches, chasing one another up the highest trees, sticking their stubby noses into everything, and mauling their tired mother unmercifully. Mamma patiently endures this foolishness, but when she says "enough" she *means* enough.

By the following autumn the cubs weigh forty to sixty pounds and are generally less than knee-high to a man. The adult black bear's size is commonly exaggerated. Females seldom surpass 250 pounds in weight and males, although much larger, generally weigh less than three hundred pounds. Four hundred pound specimens are mighty rare. The bear's usual color is glossy black with a brown muzzle, but reddish brown individuals known as "cinnamon bears" are sometimes seen in Pennsylvania. Nowhere in the East, however, is this color phase as common as in many western localities.

Like man, the black bear walks with his heel touching the ground. Except for the claw marks prints of the hind foot look somewhat like those of a barefooted (and pitifully pigeon-toed) man. An adult's hind foot measures six to nine inches in length.

The normal gait of the bear is a loose-jointed, ambling walk. For a bit more speed he shifts into an awkward shuffle. When frightened though, he belies his apparent clumsiness by galloping over ridge and hollow with unexpected speed. What is particularly impressing is the astonishing ease with which a scared bear can literally flow up the steepest mountainside.

Unlike the grizzly bear, the black never outgrows his climbing ability. While on a grouse hunt a friend and I once watched a black bear of at least 250 pounds effortlessly bound up a nearly vertical ten-foot bank and on up another ten feet into an old apple tree that grew on the top.

After noisily munching apples for a few happy moments he winded us. Whirling, he leaped from the tree as lightly as a cat, cleared the stream with a single bound and disappeared into the timber on the other side. The feline grace of that over-sized creature left us open-mouthed.

Due to his size and formidable physique the bear has little to fear from natural enemies. Only man preys on the Clown of the Woods with any appreciable effect. Bagging a black bear in Pennsylvania is pretty uncertain business, though. The country he calls home is big and it's rugged, and Bruin himself is no push-over. His eyesight is notoriously poor, but his hearing and scenting abilities are extremely acute. Furthermore when danger threatens he scrams first and asks questions later. Two things are often his undoing. One is his large size and conspicuous coloring. The other is the fact that driven bears have regular crossings that are used year after year. Hunters who learn of these spots stand a good chance of intercepting the critter when organized drivers are in operation.

The black bear is not particularly hard to kill; a good deer rifle will do the job. Light, high-speed bullets, however, are somewhat inclined to blow up on the heavy bones and

allow the crippled beast to escape.

As many a hunter has learned, killing the bear is the easy part. Getting three hundred pounds of roly-poly bruin out of the woods is a job for *men*—the more men the better. And as one guy expressed it, "there's no place to ketch hold of" on a bear.

As a trophy the black bear is one of the most highly prized in the state. Unfortunately, the same can't be said of the meat. Some, especially the females and younger males, are pretty good eating, though coarse in texture, but I've eaten (or tried to eat) the meat from rank old boar bears that absolutely wasn't fit for 'possum bait.

So far the black bear seems to be holding his own in Pennsylvania. Fortunately, bear habitat is nearly as extensive as it was fifty years ago, and the feed situation is probably better than it has been at any time since the loss of the native chestnut. The illegal killing of cubs by careless hunters seems to be the greatest threat to their well-being. When we consider that a bear doesn't breed until it reaches the age of three and a half years, and even then produces young only every other year, it is not unreasonable to believe that too many such mistakes can be mighty hard on our bear population. On the other hand, if we confine our killing to legal animals the future of the Clown of the Woods should be secure.

## ANSWERS TO THE QUESTIONS

1. During the winter, while the mother is hibernating.
2. False. Its eyesight is probably the poorest of its senses.
3. The average annual kill is less than four hundred.
4. Because bears that lose their fear of humans are not to be trusted.
5. True. Ants, for instance, are one of their favorite foods.
6. False. The wild black bear is deathly afraid of humans.
7. It generally offers less shelter or concealment.
8. Yes.







# Squirrel Hunting - Navy Style

By Lefty Kreh

**I**T was too early for the crow and too late for the owl, the time when all the world seems to rest for a few minutes before starting the new day. The creek below us was lost in the rising fog.

We put on our hip boots and grabbed the gear and canoe. Walking through the wet grass, washed with dew, we moved noiselessly down to the water. We slid the canoe into the stream and waded out until it was knee-deep. John stepped into the canoe while I held it steady, then I eased into the back seat. Giving a push with the pole, we began to move silently down the stream.

A squirrel barked on our right, breaking the silence. I quickly moved the canoe to that bank. We sat for a minute trying to pierce the fog. Pushing close to the shore the canoe hit a rock with a loud thump. John saw the squirrel as it streaked for its den.

Twisting in the seat he shot, missed and shot again. Then it was too late,

for the tree seemed to swallow the squirrel. John's face was as red as his hat.

"I never saw a squirrel move so fast—or me so slow" said John. "Twisting around and shooting off balance kind of makes this hunting tough," he went on. "Just get me up on another one and I'll show Mr. Squirrel I've learned a thing or two."

Five shots later he got his first squirrel and I don't think I've ever seen a man so pleased with himself. John's average picked up later in the morning as he began to get the hang of this novel way to hunt nutcrackers.

We stopped for coffee and a snack after the sun burned the fog off the stream. We sat on a gravel bar and watched the yellow leaves of the maples and poplars spin their dizzy way to the surface. It looked like a shower of gold.

John sipped his coffee and seemed deep in thought. "This is fun and tough shooting as well," he said. "I

always thought squirrel hunting was 90 per cent hunting and 10 per cent shooting. But from a canoe or boat it's almost 100 per cent shooting. I can see it's a waste of shells to shoot in an awkward position, or too fast. I'm going to take more time with my shots," he explained.

John's experience is typical of the gunners I have taken floating for squirrels on small streams. More squirrels are usually seen during a day's float than in a week of still hunting. Most of them are traveling along the river banks, or leaping among the branches and shooting from a bouncing canoe or light boat will test any gunner's skill.

Anyway you look at it, squirrel hunting navy style, takes more shells than still hunting. Shooting from a cramped or twisted position, as the canoe rushes by a moving squirrel takes a bit of doing and is strictly work for a shotgun. Few sitting shots

at bannertails are encountered. The unsteady, rocking boat or canoe makes a rifle sight dance all over the landscape.

Sneaking along a small stream in a light craft, can't be beat and it's one of the most exciting ways to hunt. You should get on the stream early, for the first two hours of the morning are more productive than the following five. Almost invariably the major portion of the squirrels seen on a float trip are observed just after daylight.

Later in the day they either turn in their dens for a little shut-eye or lie on a high limb and sun themselves. Unless their tail waves in the breeze to attract the hunter's eye, a basking squirrel is mighty hard to spot.

Floating is good conservation too. Instead of taking a whole family of squirrels from one woodlot or hillside, as the stalker does, the floater

**STREAM DETOURS** are sometimes necessary in squirrel hunting from a canoe. On small streams and creeks trees blown over in storms may completely block passage. Here the hunter works the canoe under a fallen tree and into the clear water below.





picks up one here and another farther down the stream. Since many colonies of squirrels are seen when floating, there's no point in trying to clean out one entire group.

Tree lines along many of the streams in Pennsylvania are only thin borders of shade. This makes it nearly impossible for the hunter to sneak unseen along the banks and approach the sharp-eyed squirrels who live along these waterways. Floating along in a boat or canoe is another thing. They just don't seem to notice someone who drifts along with the current—that is until the hunter makes a quick move or the canoe scrapes a rock. Then the squirrel proves he's part of the jet age.

Little equipment is needed to float, for squirrels on the many hundreds of small streams in Pennsylvania. A canoe or light boat is required—and it must be light. Sometimes the craft must be lifted over trees which have fallen across the stream or pulled through shallow riffles. Hip boots are a necessity, both to wade over shallow spots and to step out and retrieve squirrels that have fallen on the banks. A 12-quart bucket is also a good bet. Getting in and out of the boat or canoe deposits a lot of water on the floor and there's nothing as sad looking as a wet squirrel. Dropping them into a bucket reserved for this purpose eliminates the problem.

Although not necessary, a light anchor comes in handy. As the craft moves downstream, the squirrels can be heard cutting nuts or moving about in the trees overhead. Easing the anchor overboard the hunter can hold in the current until the squirrel is located. Since the current in most streams is not swift, an anchor of about eight pounds is ideal. Some gunners take a four-inch radiator hose and slide it over a piece of round stock about six inches long and four inches in diameter. A screw eye is placed in one end and the rope attached to this. This can be placed



**SQUIRREL FOR THE BUCKET** is dropped by this successful hunter. A metal container that's waterproof keeps the squirrels in good condition until ready for cleaning.

in the water and put back in the boat without a sound.

Most sneak boaters prefer to use a pole to move the canoe or boat along, rather than a paddle. However, a paddle lying in the bottom is an aid. If the poler sees an escaping squirrel, he can toss the pole away and shoot. Later he can take the paddle and retrieve the game and the pole.

Floating downstream is much more effective than moving up against the current. All types of wildlife seem to notice quicker an approach against the current.

A good days float for two will consist of about six to eight miles of water. This means a car at the point of departure and one where the hunt ends. Actually, only one set of car carriers is needed. They can be taken along in the canoe and placed on the downstream car at the end of the day.

One question most squirrel hunters ask immediately is what happens to a squirrel that falls into the water—will it sink? Yes and no. If it falls from a great height or goes completely under upon striking the water it will sink. However, most of the time they float like a cork. Then too, since most of the hunting is done on small streams which are fairly shallow, those that sink are not too hard to recover.

One enjoyable facet to floating for squirrels is the many types of wildlife seen while drifting. Ducks, deer, muskrats, mink, coons, foxes and groundhogs to name a few. Floating for groundhogs, using either a rifle or bow, is a sport to be enjoyed in itself.

The same goes for crows. After we get our limits of squirrels we usually burn the rest of our shells on those black aerial targets. Pull in under an overhanging tree when crows are nearby. Moan softly through a crow

**SQUIRRELS USUALLY FLOAT** and the gunner picks up this one as it drifts by the canoe. If the animals are shot from a great height, they may go under upon striking the water but they usually will return to the top quickly.



call and they'll streak in. After one is knocked down throw him out on the water where the rest of the crows can see him. They'll dive so close that shots can be measured in feet rather than yards. In fact, floating a small stream when it's a little flush from rain and stopping to call crows every half mile or so, can furnish some of the fastest shotgun shooting in Pennsylvania.


The best streams for hunting average less than 100 feet in width, down to the smallest ones you're able to float. The smaller the creek the better. On very small ones both banks can be hunted at once. This means twice as much cover hunted on a small stream than when you float a larger river where squirrels on the other bank are out of hearing.

Drought effects the nut crops to a great extent; timber operations and other factors all contribute to fluctuating squirrel populations. Not so along the creeks and rivers. Here it's difficult and undesirable to cut the soil-holding trees along the banks. Also, the stream supplies the trees with a constant source of water and results in a good nut crop year after year.

Many summer foods of the bushy-tails are found in creek bottoms. The damp shaded ground is perfect for mushrooms, ferns and other squirrel nourishments.

For many the selling point in floating for squirrels along a peaceful stream is not the number of squirrels bagged or the other mentioned things. Rather, it's the companionship of your hunting partner. In still hunting, one must of necessity hunt alone. When hunting from a canoe or boat two can share the day's fun. To miss an easy shot or to have a friend witness a sensational shot at a leaping squirrel is twice as enjoyable than when hunting alone. Sneaking for squirrels in a boat or canoe is a must on many gunners' seasonal schedule and for good reasons too.





# The Pennsylvania Deer Story— 1959

By Stanley E. Forbes

## A LOOK AT LAST YEAR'S HARVEST

### Antlered Deer

**A**LTHOUGH the 1958 antlered deer harvest was 5% below that of the 1957 season, it still rated as one of the most successful seasons ever held. The total reported kill of 46,738 legal antlered deer in 1958 was more than 8% above the average annual antlered kill for the past five years. In some areas of the State,

especially in the northwest, severe weather conditions interfered with the harvest during both the antlered and antlerless seasons. Hence there was a decrease in the kill in some counties due to bad snow and weather conditions. A comparison of kills by county for 1958 with the average annual kill of the previous five years is shown in Figure 1.

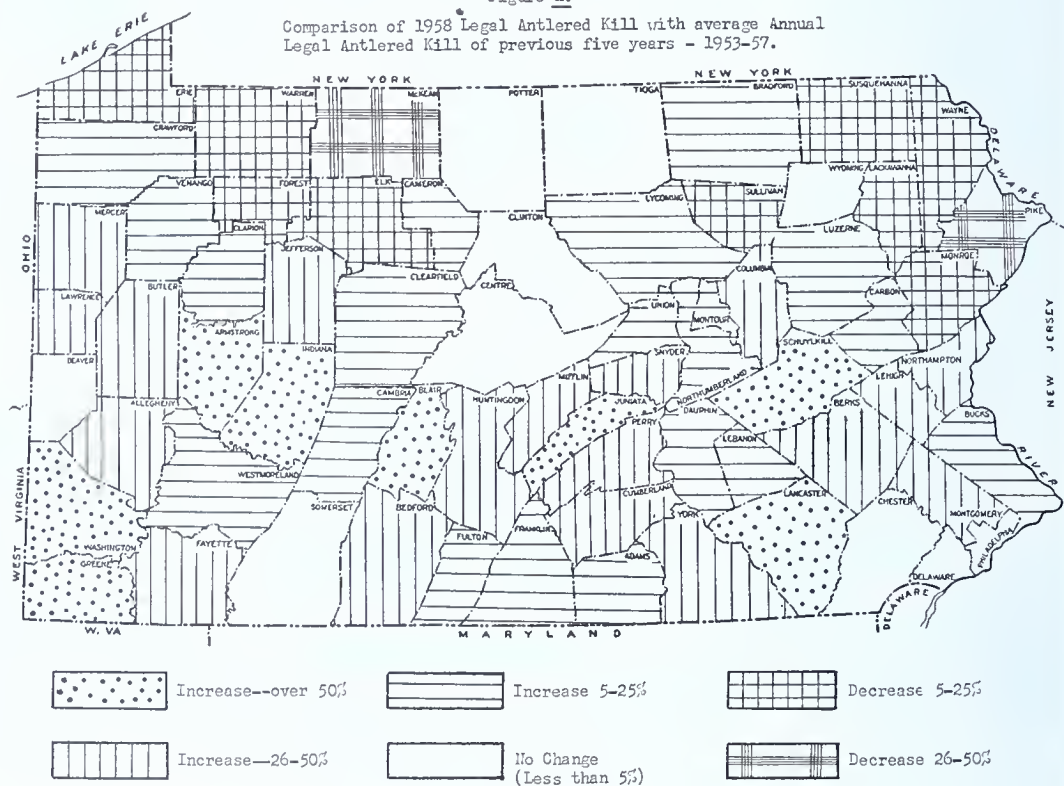
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Stanley E. Forbes is a Game Biologist, Division of Research, Pennsylvania Game Commission. He has been associated with the Deer Study for the last six years. This study is an approved PR project and is now staffed as follows: Leader—Stephen A. Liscinsky. Associate Leader—Stanley E. Forbes. Assistant Leader—Lincoln M. Lang.

In comparison with the average annual kill over the past five years, 8 counties showed little or no change; four of these counties are within the "core" of the big game country. Eleven counties showed a decrease in kill, with only McKean and Pike showing an appreciable drop. The remaining 48 counties showed an increase in the reported kill of 1958 over the five-year average with eight of these having an increase of more

Figure 1.

Comparison of 1958 Legal Antlered Kill with average Annual Legal Antlered Kill of previous five years - 1953-57.



than 50%. Greene County showed an increase of 99% and Armstrong County an increase of 64%. It is significant to note that the counties within the traditional big woods country showed only a slight increase, whereas many counties elsewhere in the state showed a marked increase. This again indicated the need for more rigid control of the herd in the agricultural or semi-agricultural counties where productivity is higher. Also indicated was the poor condition of the range over much of the big woods country.

Twenty-five percent of the antlered males examined were "spikes." This is the same percentage as found among those examined the previous season. Almost half the deer examined had more than a total of four points. The percent of total examined by number of points, and the average number of points by age class were as follows:

No. of Points	% of Total Examined	Age Class	Ave. No. of Points
2	25	1½ yrs.	3.8
3	9	2½ yrs.	5.5
4	19	3½ yrs.	6.9
5	9	4½ yrs.	7.2
6	15	Older	7.7
7	6		
8	12		
Over 8	5		

Average basal diameters of the antlers varied little from those a year ago. There was a slight increase (1/32") in the average of the yearling group, which reacts most readily to varying food conditions:

Age Class	Average Basal Diameter (Inches)
1½	.6875
2½	.8125
3½	.9375
4½	1.00
5½	1.0625
6½	1.34375



The average hog-dressed weights for the deer examined were taken from "Locker Plant" records, or were taken by our own personnel:

Age	Weight in Pounds	
	Male	Female
Fawn	59	53
1½	101	91
2½	113	98
3½	137	102
4½ and Over	132	98

Antlerless Deer

The 1958 reported antlerless deer kill was the greatest since the allocation system was established. The number of licenses likewise was the highest. The statewide hunter success ratio was 5.3 licenses per deer killed, which was the best success ratio experienced since the inception of the license allocation system. In previous years, the number of licenses issued varied from 103,765 to 336,500. The hunter success ratio during this time deviated little from 6 licenses per deer killed. Few counties showed a poorer success ratio in 1958 than in previous years, and most of these counties were in the sections where the severe weather definitely influenced hunter activity.

The age class composition of the adult deer examined during the antlered and antlerless seasons is shown below. Sixty percent of the legal antlered deer were only 1½ years old, and less than 4% were over 3½ year old. By contrast, 28% of the adult females were 1½ years old and 27% were over 3½ years old.

Adult Age Class Composition

Antlered	%	Female	%
1½	60	1½	28
2½	23	2½	26
3½	13	3½	19
4½ & over	4	4½	12
		5½ & over	15

The percentage of fawns in the antlerless kill for 1958 was 39%. The percent of males in the fawns killed

was 51.4%, a figure that has been almost constant since 1955. This indicates a sex ratio of 106 males to 100 females.

Adult males which had shed their antlers constituted almost 39% of the antlerless deer examined.

Sex and Age Composition of Antlerless Deer Examined		
Sex and Age	No. Examined	Percent age
Female Fawns	311	19%
Female Adults	935	58%
Male Fawns	329	20%
Male Adults (shed)	47	3%
TOTAL	1,622	100%

DEER KILL REPORT SURVEY

In several years of the last decade surveys have been run to determine how many successful deer hunters reported their kill as required by law. The ratio of successful hunters reporting has ranged from 69 to 78% in various years. In 1958 it was found that 75% (3 out of 4) of the successful deer hunters reported.

Out-of-Season Mortality

During 1958, the deer mortality from various causes throughout the State was reported as follows:

Cause	Number			Total
	Male	Female	?	
Damage	822	1381	5	2208
Dogs	270	593	49	912
Vehicles	3145	5150	121	8416
Illegals	806	1674	101	2581
Miscellaneous	664	1121	68	1853
TOTAL	5707	9919	344	15970

Total deer kill is not necessarily a good measure of deer density because of the variation in either the size of counties or the amount of forested area within the county.

The total number killed by dogs almost doubled during the past year; kills for crop damage remained approximately the same, kills by vehicles and by miscellaneous accidents decreased slightly. The total out-of-

season kill of 15,970 for the year 1958 was the highest ever reported.

The winter mortality which occurred in the late winter-early spring period of 1959 appeared relatively light. Surveys of selected sample areas in Cameron, Elk, McKean, and Monroe Counties and reports from District Game Protectors indicated a Statewide loss of approximately 1,000 animals. It was one of the lightest winter mortality losses reported in recent years.

### HERD PRODUCTIVITY AND SIZE

Most of the breeding occurred in the last twenty days of November, 1958, with the peak of the breeding activity occurring from the 17th to the 23rd. From this, it was calculated that the peak of the fawning activity was reached June 1 through 7, 1959.

The percent of females breeding during the past season indicated that a good fawn crop could be expected. Records show that only 15% of the female fawns bred this year in contrast to the 20-30 percent recorded in years past. However, this is considered more normal as a statewide average because breeding at this age is confined almost exclusively to the better food areas of the southern and northwest sections of the State. In years past, most of the fawns examined were from these sections, hence a biased high percentage of fawn breeding was indicated. This year, however, more effort was made to get information from all of the state instead of from those two sections. The percent of adults breeding equalled the all-time high of 96%, established in 1956. The percent of age unknowns that were bred dropped to 84% but is assumed that some of these were fawns.

The number of fawns per breeding female was found to be 1.7. This figure included all breeding females, fawn and adult. For breeding fawns the production was 1.0, for adults 1.6, for age unknown 1.8.

The sex ratio of fetuses in uteri was 140 males to 100 females. There was a decided increase in the number of twin fawns produced this year.

The average annual reduction rate for all causes throughout 1958 for males was 59.8%; and for females 26.2%. The *reported* mortality from all causes for males was 65,866, and for females 62,685. However, the actual mortality was much higher since only 75% of the successful hunters reported. The actual hunting season kill approached 150,000 deer. Using the data available, the estimated 1959 fall population will be over 500,000 deer.

### RANGE DATA

During the past winter a range survey was made in the central portion of the State within the Northcentral and Southcentral Divisions.

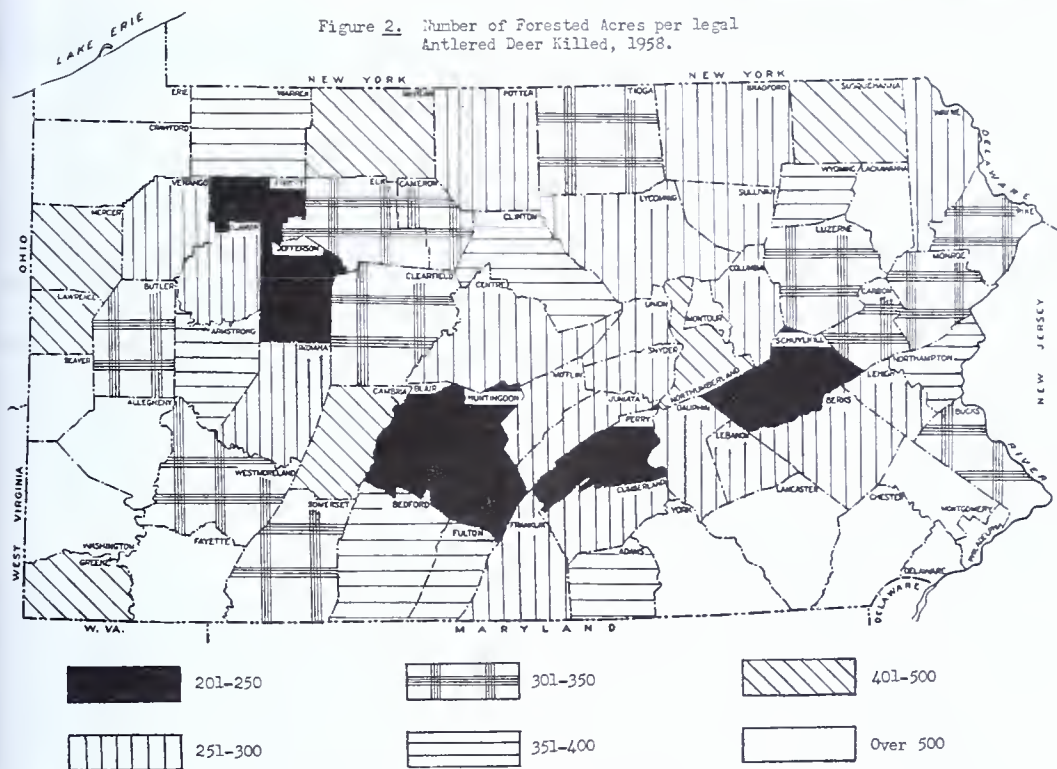
Although a number of forest types occur in Pennsylvania, only two of them, Beech-Birch-Maple, and Oak-Hickory are extensive. Of the 15 million forested acres in the State more than one-half is classified as Oak-Hickory Forest type.

Conditions within the Northcentral Division showed that species of trees or shrubs that were high in palatability (good browse) were low on occurrence and availability. Such species were maples, dogwoods, viburnums, aspen, sassafras, and oaks. These showed moderate to severe browsing or utilization. Species that were lower in palatability were somewhat higher in availability and the utilization was only from light to moderate. Density of the stands moderate to heavy. The major portion of this division is already in a severely overbrowsed condition, and the quantity of browse available will become less each year as a result of natural forest succession.

In the Southcentral Division there were many more desirable or palatable species available for the deer than in the Northcentral Division. Maples, sassafras, oaks, dogwoods, viburnums, azalea, blueberries and huckleberries



Figure 2. Number of Forested Acres per legal Antlered Deer Killed, 1958.



were more abundant. Most showed only light to moderate browsing but locally browsing was severe. Density of the stands was moderate. This division is not in as severe a state of overbrowsing as in the Northcentral Division, however there are still too few species providing most of the browse. As the mature stands are cut this condition will probably remedy itself if the deer herd is kept at or below its present level.

An interesting fact came to light during this survey. Wherever an area of beech-birch-maple forest type occurred within the extensive oak-hickory type in the southcentral portion of the State, it was seriously overbrowsed while the surrounding oak-hickory showed very light utilization.

### CONCLUSION

The principal objectives of the Game Commission's management program are to maintain an optimum number of deer on suitable range and to make the shootable surplus available to the licensed hunter. If these

objectives are to be attained the deer population must be kept in balance with its food supply. Experience in Pennsylvania and other states has shown that the control of the herd depends very largely on the control of the doe deer. Antlerless seasons, therefore, are a must if the Commission is to protect timber, agricultural crops, deer range and the deer themselves.

It has been demonstrated that management problems change rapidly as the deer herd increases or decreases, and the type of problem varies regionally and locally. The antlerless license allocation system serves as a sound management tool whereby the hunting pressure and, in turn, the harvest can be controlled on a county basis.

Deer management in Pennsylvania has entered a new era—an era in which our deer herd is providing maximum recreational value but at the same time adequate protection is being given both the herd and its range.

# What Is A

By Charley

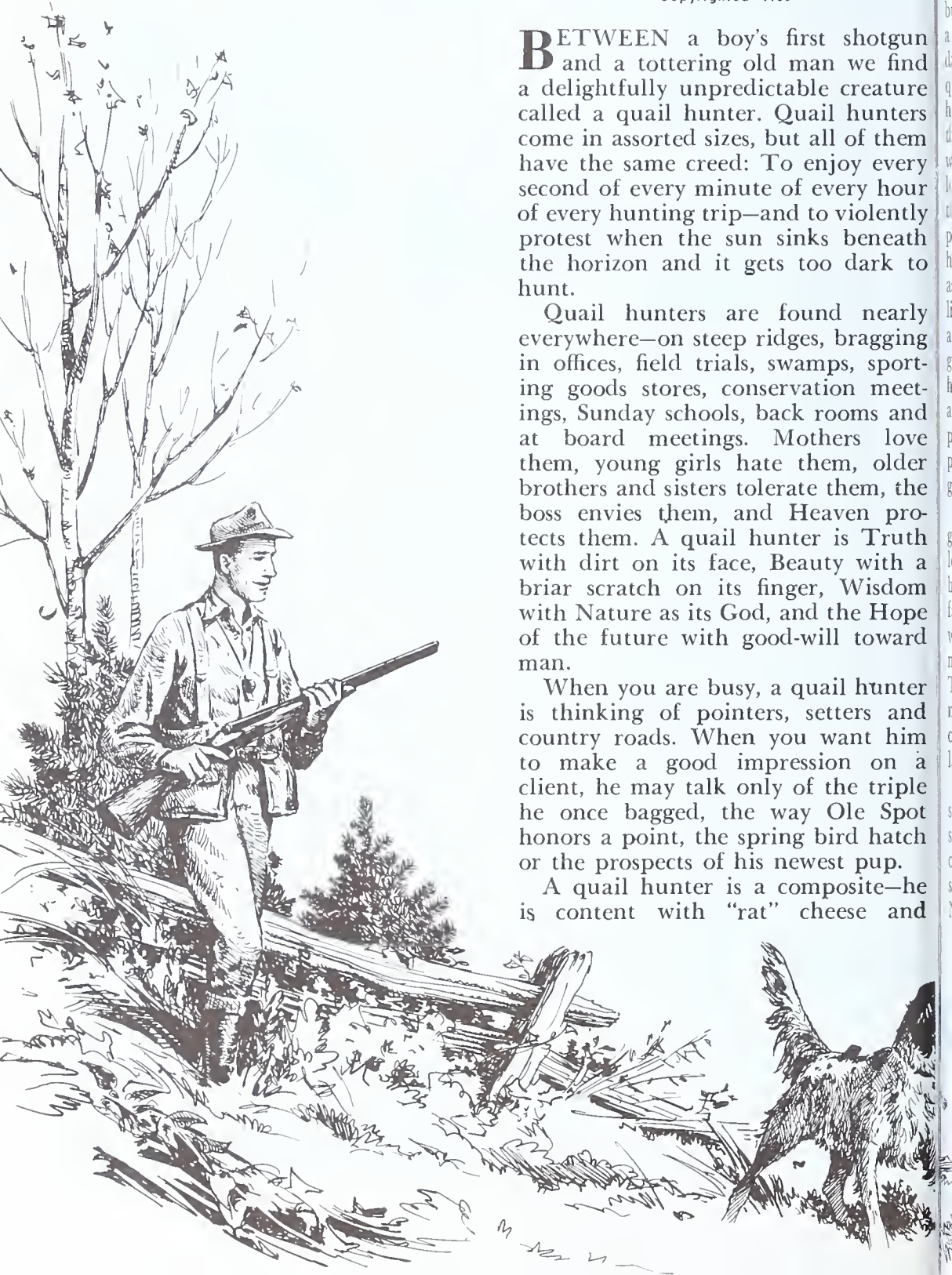
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**B**ETWEEN a boy's first shotgun and a tottering old man we find a delightfully unpredictable creature called a quail hunter. Quail hunters come in assorted sizes, but all of them have the same creed: To enjoy every second of every minute of every hour of every hunting trip—and to violently protest when the sun sinks beneath the horizon and it gets too dark to hunt.

Quail hunters are found nearly everywhere—on steep ridges, bragging in offices, field trials, swamps, sporting goods stores, conservation meetings, Sunday schools, back rooms and at board meetings. Mothers love them, young girls hate them, older brothers and sisters tolerate them, the boss envies them, and Heaven protects them. A quail hunter is Truth with dirt on its face, Beauty with a briar scratch on its finger, Wisdom with Nature as its God, and the Hope of the future with good-will toward man.

When you are busy, a quail hunter is thinking of pointers, setters and country roads. When you want him to make a good impression on a client, he may talk only of the triple he once bagged, the way Ole Spot honors a point, the spring bird hatch or the prospects of his newest pup.

A quail hunter is a composite—he is content with "rat" cheese and





# Quail Hunter?

Dickey

crackers for lunch at a country store but his ulcer has to be pampered with a special diet when he's home; he will drink from any old well without question; he has the energy of a hurricane when he starts hunting although in the office it tires him to walk to the pay window; he has the lungs of a dictator when he yells at the dogs although his secretary complains that he whispers all the time; he has the imagination of a scientist as he looks for coveys along each likely edge; he shows the audacity of a steel trap as he tramps through green briars oblivious of the pain in his thighs; he has the enthusiasm of a firecracker as he beats every brush pile, and when the dogs do go on point, he has forgotten to load his gun.

He likes dirty hunting pants, old guns, hunting knives, leaky boots, long weekends, all kinds of field dogs, back roads, wool shirts, abandoned farms and questionable companions who also are quail hunters. He is not much for social gatherings between Thanksgiving and March, stray cats, neckties, educational books, weekend company, barbers, people who post land, and clients who don't hunt.

Nobody else is so early to rise, or so late to supper—during the bird season. Nobody else gets so much fun out of chasing dogs, trampling honeysuckle, and getting mud on his feet. Nobody else suffers so silently with

aching feet, twisted ankles and strained muscles. Nobody else can cram into one pocket a rusty knife, 17 No. 8 shells, an extra pack of smokes, a compass that doesn't work, six dog biscuits, change for lunch, a hunting license, waterproof matches, a crow call, a red handkerchief, last year's duck stamp, extra boot laces, a broken dog whistle, a snake-bite kit, and a bottle opener.

A quail hunter is a magical creature—you might get sore at his constant chatter about birds but you can't lock him out of your heart. You can assign him itineraries in the spring, but you know where he'll be in the fall. His sales chart will be as good as the next, but he'll get it there in his own sweet time. He may be the very one who sells the "rich old buzzard" who spends his winters quail hunting in Georgia.

You might as well give up—the quail hunter is a child of Nature with a hopeless one-track mind. He'll do his work with the best of them, but when November rolls around he's out in the field behind a young pup and an old veteran on the prowl for Mr. Bobwhite. He's earnest in his work but he's just a little more sincere when he's slow-trailing a jumpy covey.

And though you get sore at him in the winter, you know you'll always like him. There's something about him that rings true—he's almost too honest. He's a simple and kindly man who asks no more of life than that the birds fly fast, the dogs hold tight, and everything has a sporting chance to live or die.





# All You Can Eat For A Buck

By Milo Zimmerman

**D**EER hunters from a half-dozen states and some 350 towns and cities find a real "grub stake" as they travel along U. S. Route 119 toward their camps and favorite woodland haunts in Pennsylvania's big game lands on the two days preceding each annual deer season.

For that's the week-end of the big, two-day Sykesville Pan Cake Fry, an annual event held since 1954 and designed especially for buck hunters, who, the sponsoring Lions Club members claim, "are the best sportsmen in the world."

It was started as an experiment by the Lions—an experiment to find a way to serve this army of fine sportsmen as they pass through the town in cars, at times virtually bumper-to-bumper, on these two pre-season days.

And, having hit upon the idea of Pancakes, they decided to go all out and make it a real treat, one the hunters and others could hardly afford to pass up.

They adopted the slogan "all you can eat for a buck" and have made that stick through all the succeeding years. It still applies, despite rising costs of everything that goes into making the affair click. "One buck" and the customers can sit and eat as long and as much as they want.

Servings consist of pancakes or buckwheats; home made pure pork sausage; butter, syrup, juice, cranberry sauce and coffee. The big electric griddles are heated up early each morning and the sausage skillets begin sizzling simultaneously. Then throughout both full days and eve-



nings a continuous flow of "Aunt Jemimas" and the home made sausage keep rolling out for all who care to sit a spell and eat. They get served at once and at any hour of the day and as long and as much as they want.

It was a small beginning, back in '54, but that year some 350 hunters dropped in to see what it was all about. They came back, and brought their friends, and told others. Last year the patron list had grown to more than 2,300.

The first Fry required about 200 pounds of the home made sausage. In 1958 it took a solid ton—two thousand pounds, made from 4,400 pounds pork-on-the-hoof, all prime porkers; and all the sausage-making done by the Lions Club members. More than a half-ton of pancake and buckwheat flours were needed last year; and some twenty cases of Pet milk for mixing batter; and over 50 gallons of syrup,

200 pounds of butter; twelve gallons of cranberry sauce; some 200 pounds of coffee. And a hundred and one other smaller items.

The sausage used for the events is said to be "out of this world." It is made by an old formula handed down from generation to generation of Jefferson County farm folk. And the full product of every porker is put into the sausage: hams, shoulders, chops, and all. The seasoning is the only guarded secret and that's done just so. No other way will do.

The Lion sponsors get a great deal of help from towns folk who pitch in and help, some 200 of them. One ladies club handles the favors; another makes the sausage patties; still another handles the serving throughout the two days. Volunteers come forth for a turn with some, during the full two-day event, frying sausage, flipping cakes, washing dishes, and doing the hundreds of other jobs



DEER HUNTERS from far and near take advantage of the Sykesville Lions Club hospitality. If they leave without loosening their belts, it's their own fault.

that need be done. It is a total community effort.

Other sources of help are also forthcoming. A congenial fellow by the name of Charley Moore brings the Aunt Jemima flours and stays right with the Fry both days and nights to direct and help with the batter mixing and general management. His sleeves are up from morning 'til night and so are those of another guy named John Eckert, the Pet milk man, who stays right with it both full days too.

And then there are those towns people who have been loyal helpers for 15 hours a day and more throughout the years. Some even arrange their vacations so that they'll be "off" for the Pancake week-end to man their regular battle stations. Without this civic minded help the event just could not be staged successfully.

Quite an organization is necessary to conduct the event and its planning. Seven divisions are operated within the Lions Club, each with a manager and staff.

The publicity staff handles an annual mailing list of about 2500 re-

minder cards; letters to fellow Lions Clubs; highway signs placed 60 miles south of town on Route 119 Friday night and picked up Sunday night; street banners and direction signs and the "highway patrol" which waves down motorists and reminds them of the big event just ahead.

Then there's the location division; the equipment staff; the procurement committee; the ticket sales division; the personnel staff and the financial committee, all cooperating and working closely with the general manager.

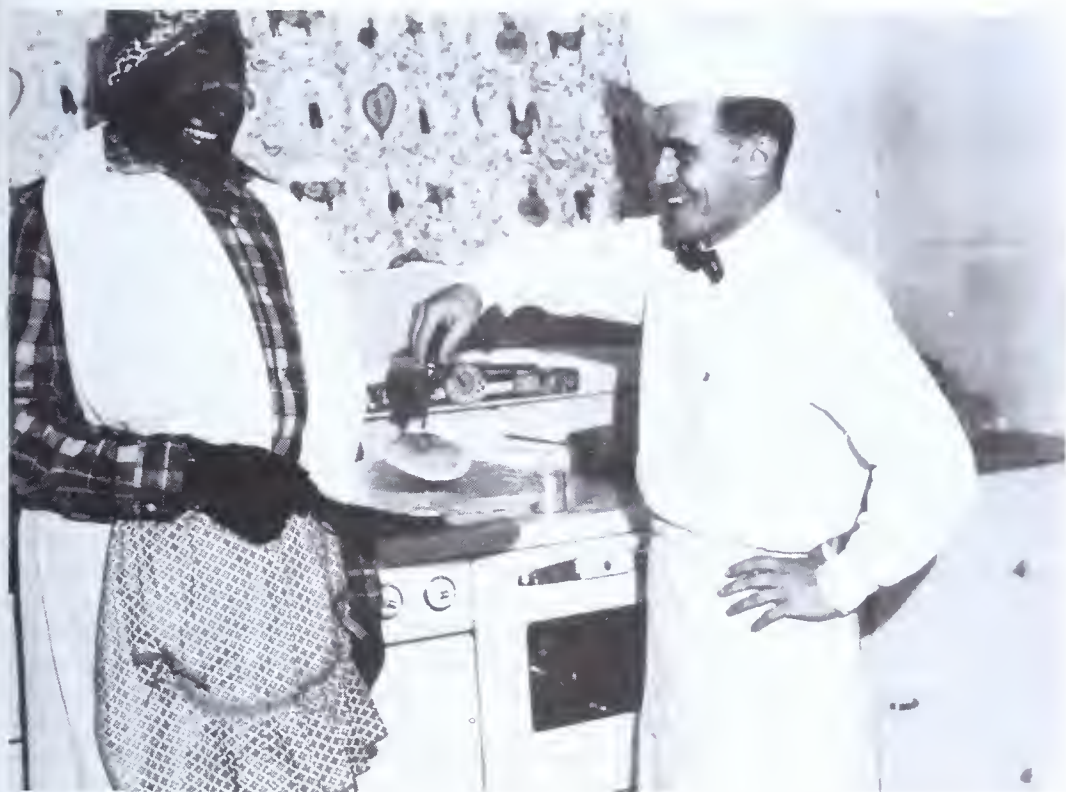
Profits aren't great on an event of this kind but through the sale of some of the sausage "by-the-pound" and sales of other items by the club during the event, it has shown a nice income each year. Every penny of the profit is earmarked for a community building fund. Every penny, that is, not needed first to buy eye glasses, or to help a needy family, or to help make some unfortunate fellow human happier. For those are the first considerations of the Lions.

The ultimate goal, however, is a large community center, where the pancake fry and many other commu-

**BUTCHERING STAFF** cuts up and grinds the sausage during the two evenings prior to the Sykesville Pan Cake Fry. Last year it took a solid ton of pork to feed the army of deer hunters. The sausage is made from an old formula kept secret by Jefferson County farm folk.







AUNT JEMIMA and pancakes go well together. Lion Club members and their wives always have a trial run prior to the days set for the Pancake Fry. Here one of the members poses as Aunt Jemima while the secretary feeds him the first of the "test" cakes.

nity events can be held. The Lions have already bought a fine corner site for the building and have plans all ready to start the work. But penny profits count up slowly and rather than raise the price from the original "buck" the Club will take it easy and watch the building fund grow and ultimately come up with their dream of a new home realized.

First of the events was held in a revamped empty store room and an improvised kitchen. The next year it was moved to a local restaurant which the club rented for the two days. Then on to the larger dining room of the local hotel. All were too small for the expanding patronage. This year the Fry will be held in a local factory building which has been graciously donated by the management and where all the space needed is to be made available.

Preliminary plans are started early each year for the two big dates uppermost in the minds of Sykesville people, the Pancake Days, when Sykesville hosts the hunters. Anticipated attendance this year is set at some 3,000. The dates are Saturday and Sunday, November 28 and 29.

Readers of the "Game News" would do well, both for themselves and the Pancake Fry sponsors, to stop in at Sykesville and take advantage of this unusual and fully worthwhile event. We're sure you'll be made welcome. And if you leave without loosening your belts the fault is all yours.

As the sponsors say "the more you eat, the 'batter' we like it." Pancakes or Buckwheats; home made sausage; syrup; butter; cranberry sauce; eggs, coffee. And all you can eat for a "buck". You just can't miss.



### Fraidy Cats

**BERKS COUNTY**—John Wilttrout, a foreman on our Food and Cover Crew, and his wife have a couple of cats which are a close part of their family life. One of them even lets him know when the phone rings late at night.

One morning not too long ago the cats started to kick up a fuss while sitting at the window. Their backs were arched, hair standing up and they seemed to want to fight something outside the window. When John looked out to see what caused the commotion, he got a surprise. Sitting on a box just outside the window was a big groundhog looking in at the excited cats. He was probably interested in seeing how the other half lives.—Samuel C. McFarland, Land Manager, Centerport.

### Time For Alarm

**FULTON COUNTY**—While on a Field investigation, Trooper Eiker froze in his tracks, saying "Don't move, Rattle Snake." The villian was promptly located, wrapped around his wrist. His little daughter had set the alarm on his Dick Tracy Wrist Alarm Watch.—District Game Protector Carl Jarrett, McConnellsburg.



### On the Heels of a Storm

**BLAIR COUNTY**—Recently we had a storm here that amounted to a cloudburst and a great many homes had water in their cellars, causing a great amount of damage. After the storm was over I had a stream of water running in one side of my basement and out the garage door which had been left open. There was also a layer of mud over the entire floor. The next morning, I had occasion to go in the basement and there I saw evidence of a visitor. Where he came from I do not know but from the tracks it was evident that a large Mink had been there and hadn't missed a thing as his tracks were all over the place.—District Game Protector Russell Meyer, Altoona.

### Tall Timber

**CLEARFIELD COUNTY**—While enroute to Harrisburg with Student Officer Bond, a large timber rattlesnake was spotted along the Clearfield road. It is the largest timber rattler that I can recall of ever seeing in the twelve years that I have been studying and collecting snakes. I would estimate the overall length of this snake was better than 66 inches with a maximum girth of between 9 and 10 inches. Bond stopped the car along the road while I examined the snake; evidently someone had struck it with their car and had stopped and finished off the rattler with a large rock. The rattlers had been removed, and the head crushed. The color was a black and gray shade, the darkest I have ever seen in Pennsylvania.—Student Officer Cordell Martz.





### In a Jam

**BERKS COUNTY**—A local groundhog hunter had trouble with the extractor of his rifle. When it did not function he used one rib from an old umbrella, as the only available substitute, but it was too short. A second rib, tapped into the muzzle, only served to jam the bore. While he used his available tools trying to clear the gun, 3 groundhogs ran around and made fun of his helplessness, in a newly mown grass field.—Joseph Leiendecker, District Game Protector, Reading.

### Seeing Is Believing

**ELK COUNTY**—On August 19, Officer Servey and myself conducted a tour of wildlife development work being done on Game Lands in Elk County. It was gratifying to find how many sportsmen were interested in this phase of the Commission's work. Thirty-two autos with approximately 100 occupants made up the tour. The first cars in the caravan were able to see deer utilizing the food plots. In one of the plots a buck with very nice antlers and three does stayed long enough to have quite a few view them. Browse cuttings done during last winter and forest reproduction in areas that have been timbered off were well received by those present. Of such interest was the tour

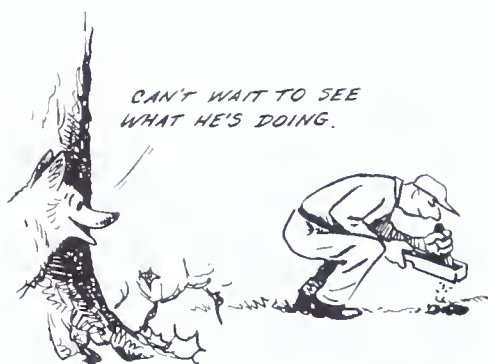
that it was well after dark when it broke up. Quite a few of those present stayed to ask questions and comment to Officer Servey and myself long after dark.—Robert H. Sphar, Land Manager, Wilcox.

### Pheasants Afeld

**BUCKS COUNTY**—On August 10th, I saw 42 pheasants in a field containing about 2 acres. As near as I could tell there were about 5 broods in the group of pheasants. I don't know how common such large groups are but it is by far the greatest concentration of pheasants I've ever seen in a wild state.—Alfred Graver, District Game Protector, Quakertown, Pa.

### Trap Line

**POTTER COUNTY**—Fish Warden Kenneth Aley of Galeton, Potter County, does not believe in leaving his fox traps empty for even a short time. While trapping near Galeton during August he caught a nice red fox in one of his traps. He reset the trap and continued on with his trap line. As he neared the end of his line he remembered that he had not placed any bait in the hole at the trap he had caught the fox. The trap was near his route home so he stopped by to replace the bait, and it had another fox waiting for him. They must have stood in line to get in the trap fast.—Keith C. Hinman, District Game Protector, Wellsboro, Pa.





### Woodchuck Right-of-Way

BERKS COUNTY—On August 16, while driving along busy Route No. 22, just west of Allentown, the following incident occurred. As I was passing a line of cars, I noticed an object in the medial strip. Much to my surprise, the object was a woodchuck. This really seemed odd, because the traffic was very heavy. The woodchuck looked up as if to say, "O.K., men, I don't mind you driving through my back yard, but I'd appreciate it if you slowed down a little." Who knows, maybe the medial strip was his home before man decided he needed another thruway.—Student Officer Robert W. Nolf.

### The Little Things

SCHUYLKILL COUNTY—It was a little dog. It took a little time. It was a little phone call. It was only a little trouble but the owner of the little beagle, picked up by a Deputy Game Protector and returned, showed a big appreciation. In fact he (the owner of the beagle), said that he wouldn't take a hundred and twenty-five dollars for the beagle. It's the little things that make good public relations and big "Good Deeds."—Ralph L. Shank, Land Manager, Pine Grove.

### Who Stole His Porridge?

JEFFERSON COUNTY—On August 14, 1959, my wife, two of our friends, and I went to Cooks Forest State Park to camp out over the week-end. The following day while hiking on a few of the several trails in the area, we noticed a large number of beech trees, but the nuts on these trees were very scarce. This brought up the question on what the bears in the area would turn to for food. The next morning about seven o'clock our question was answered very well when I awoke and heard something walking in the leaves very close to our tent. I looked through the screening on the front of the tent in the leaves very close to our tent, and was amazed to see a nice sized black bear, weighing about 250 lbs., step into view not more than ten feet from where we were sleeping. The bear inspected our camp site then walked over to our ice chest, upset it off a small table onto the ground, unlatched the lid and dumped the contents onto the ground. By this time we were all out of the tent and watching the show. The contents in the chest were being eaten by the black bear. The bear paid no attention to us and went on about his business getting himself a good breakfast from our food. An attempt by my buddy to chase the bear away failed. The bruin just grabbed a package of bacon, ran about twenty feet, sat down and ate it, then returned and went through the ice chest again. After eating several eggs and sampling a large cucumber, the raider decided to leave. He ran about thirty feet very fast, sat down on a large hemlock stump, placed his front feet on the stump and looked back at us as if to say, "Ha, ha, and thanks for the breakfast," and then ambled off into the woods.—Student Officer Donald Watson.



### Vive la France

**SOMERSET COUNTY**—Information relating to Game Law violations originate from many places, but when Deputy Game Protector William Swain, Jerome, Pennsylvania, received a letter from 10, Rue Jeanne-Hachette, 10 Clamart (Seine) France, he had little thoughts of it containing information to game violations in Somerset County, U.S.A. —James Burns, Jr., District Game Protector, Central City.

### Close Shave In The Shower

**LUZERNE COUNTY**—A Kingston driver was returning home from work along the Luzerne-Dallas highway one night. When the man was almost in the town of Luzerne a bear crossed the highway in front of his auto and unfortunately he hit the bear with the front of his auto. When he hit the bear, it got up on its hind feet and shook itself causing water to cover his windshield. The driver got out to see if he did any damage to his car and to see if the bear was injured. Both the driver and the bear were lucky because there was no damage to the car or injury to the bear. The bear must have been swimming in Tobys Creek and decided to cross the highway when the driver interrupted the outing.—District Game Protector Ed Gdosky, Dallas.

### Bull Elk

**ELK COUNTY**—During the last month I received a call from a local farmer that was having trouble with an Elk destroying his crops. I went out to investigate the complaint, and when talking with the farmer he told me that there was a very large bull doing the damage and we decided possibly a good scarecrow with a loud smelling soap in its pockets may help, so one was erected. I also told him that if he shot over the animal that

it may scare him enough to keep him out.

Several days later I received a call from the same farmer and on calling on him he told me this story: On the evening after the scarecrow was put up he saw the Elk in his potatoes near the scarecrow. He took his rifle and shot over the bull's back. He told me that the bull just looked up in disgust and then kept right on eating. The second shot was fired in the dirt in front of the Elk and this time he jerked his head up but then continued to eat. In disgust the farmer went to his house and unchained a very vicious dog that he keeps there, and took it out to the fields to sic on the Elk. He told me when the dog saw the Elk, his hair raised on his back and he took out through the field as fast as he could go after it. When the dog got within 25 yards of the Bull, the Bull decided to go on the offensive and it turned on the dog and chased the dog about 100 yards on a dead run into a blackberry thicket, the only nearby place where the dog could go to escape the thundering hooves.

I made several trips to this area after that, and on two occasions I saw the bull and two cows. The bull is a magnificent animal, and I would estimate his weight at 700 lbs.—Fred H. Servey, District Game Protector, St. Marys.





WHY DON'T YOU GUYS  
GO HOME ?!!



### Sucker for a Snake

**DAUPHIN COUNTY**—Recently while on patrol on the Susquehanna Deputy Miller and I watched a N. Banded water snake approximately 3 feet long eat an 8 inch sucker. The snake brought the sucker up on a rock ledge and tried to swallow the sucker tail first. He was able to work his mouth around the fins but the dorsal fin was too much for him. After about 20 minutes he disgorged the fish and started on it head first. It took the snake approximately 12 minutes to swallow the sucker. With his belly full, the snake swam away, but had a hard time getting under water. The air bladder of the fish acted like a life preserver. We observed the snake eating the fish at a distance of about 3 feet.—Richard Ruth, District Game Protector, Lykens.

### Familiarity Breeds Carelessness

**YORK COUNTY**—Inasmuch as the Pennsylvania Game Commission has endeavored to reduce hunting accidents by all practical methods known, I wish to call to the attention of all readers of this article, the fact that even expert riflemen become involved in hunting accidents, many times through negligence. The case I am about to mention, dealt with an expert rifleman, who had been

hunting woodchucks, and inadvertently placed his rifle in an auto, loaded. Upon removing his rifle from auto, it discharged, killing him instantly. I only hope this article may speak for itself concerning loaded firearms in automobiles or places of storage.—Gerald Kirkpatrick, District Game Protector, York.

### Brother Rat

**INDIANA COUNTY**—On the evening of August 15, while in my office working on my reports, I heard the scream of a young rabbit. Rushing to the scene my neighbor was already there, and no rabbit was in sight. Kicking a pile of poles nearby, a large house rat ran out and upon removing one pole the young rabbit was found, still alive but both back legs broken and evidence that the rat had already started his warm supper. This is another perfect example of predation that I doubt if Mother Nature had planned on.—John A. Badger, District Game Protector, Indiana.

### Whistle While You Work

**TIOGA COUNTY**—It has been my pleasure this summer to have been able to hear, almost daily, the cheery whistle of the Bob White Quail from my home. This is something I have not heard for nearly twenty-five years.

Many other local residents have reported the same and have been curious as to their presence, as quail have been missing from Tioga County Farms in any number for several decades.

These birds are the survivors of a number released in 1956, and withstanding the severe winters and hunting pressure, were able to raise several small coveys this spring, and not recently stocked as thought by many.

It is hoped the hunter will overlook shooting these fine birds and give them a chance to build up their numbers to the benefit of farmers, bird lovers and sportsmen alike.—James A. Osman, Avis.



# Female Virginia Deer With Antlers

By J. Kenneth Doult and John C. Donaldson

**I**T'S NEWS, they say, when a man bites a dog, but it is also news when a female deer grows a set of antlers. This is considered to be a privilege granted only to the male of the species, but in more instances than you would guess a female is found thus parading as a male. During buck season in Pennsylvania this may be little short of suicide.

We know that the growth of antlers is controlled by the hypophysis or pituitary body, a gland at the base of the brain inside the skull. Both male and female mammals have this gland, but it must be stimulated in some way, such as by the secretion of male hormones, in order to produce the growth and shedding of antlers. If the stimulation is not adequate, antlers may grow but the velvet will not be rubbed off, or the antlers may never be shed.

The female deer does not normally produce male hormones which are sufficient to excite the hypophysis into producing antlers, but occasionally this does happen. When animals of this kind are found, it is reasonable to assume that they are getting male hormones from some source. If we can discover the source of such hormones we may learn a great deal not only about the causes of such features in deer, but by analogy, may learn much about the cause of male characteristics in the female of the human species too.

In a general way, there are three main kinds of antlered doe deer, and they differ in many ways. In the first, the animal is predominantly female; her female organs are essentially normal, she may breed, produce young and nurse them in the normal way. Her antlers are never like typically male antlers, but are usually small,

frequently spikes or with only one or at most a few prongs. The prongs may be present on one side only. The velvet is not rubbed off and the antlers are not shed. Sometimes several separate spikes may grow up from the same base. In these deer, the neck is not swollen as is typical of the buck in rutting season and the hock glands are not heavily stained as is typical in the male.

The second type is much less common than the first; the animal is essentially a male, but its sex organs are not normal. It may have both a vagina and penis. Usually no scrotum is apparent, but testes may be found buried inside the body cavity. The antlers may be typically male, well branched, hardened and the velvet rubbed off. These antlers have at their base a typical corona and are usually shed at the normal time. These deer have no milk and never bear young. In the examples of this type that we have seen the neck was not swollen and the hock glands were not stained, but further observations should be made on this subject.

The third, and rarest type, is one in which there is marked derangement of the glandular secretion and a variety of antler conditions. This may come from the presence of a tumor secreting male sex hormones. It may also come from the presence in one animal of a testes and an ovary (hermaphroditism). We have seen only one animal in this class, and so we know very little about the condition of the neck and hock glands. It is from this group of animals that we expect to get the most valuable information about the cause of antlers in female deer.

Up to the present time sixteen antlered "doe," as indicated in the fol-

lowing list, have been reported and we have been privileged to examine most of them. The preparation of organs which we have preserved and the careful examination of this material will require several months of study, so it will probably be a year or more before the full results can be published.

For their kindness and for the assistance which they have rendered us we wish to extend our appreciation and sincere thanks to these hunters and to the Game Protectors who have, in most instances, taken the initiative in informing us. We are also deeply indebted to the officers of the Pennsylvania Game Commission in Harrisburg, especially M. J. Golden, Executive Director, and R. D. Reed of the Harrisburg Office. To James A. Thompson, member of the

Pennsylvania Game Commission, and to Roger M. Latham, outdoor writer for the Pittsburgh Press, we owe an especial debt of gratitude for the assistance which they have given us. We are also indebted to all of the newspapers through the State which carried news of our project and helped acquaint the hunters with our request for assistance.

As a result of this splendid cooperation our study has been most satisfactory and we hope to continue it through the hunting season of 1959. The unusual interest in the subject and the possibility thus created to census such a vast deer population make the study a most unique opportunity to learn about the physical alterations produced, and the relative abundance of these abnormalities.

**UNUSUAL TROPHY** of the 1958 archery season was this 7-point female deer killed by Harry Frank, left, of Dalton. The deer weighed 132 pounds dressed and the rack was still in the velvet. Inspecting the unusual animal is Game Protector Billy Drasher of Schuylkill County.





Name of Hunter	Address	Locality of kill	Date	Estimated weight	Antlers	Antlers in velvet?	Milk in udders?
Richard A. Beuman	1012 Jefferson Hts. Dr., Monroeville, Pa.	5 mi. E. Ligonier, Pa.	Nov. 28, 1955				
Andy Pasko	1055 Jacoby St., Johnstown, Pa.	Shade Twp., Somerset Co., Pa.	Dec. 2, 1957				
Seward Rice	R.D. 1, Thompson, Pa.	Thompson Twp., Susquehanna Co., Pa.	Dec. 11, 1957				
Joseph Ganssle	1230 Penna. Ave., Easton, Pa.	nr. Thornhurst, Lackawanna Co., Pa.	Dec. 1957	133 lbs.	5 points left side, 4 on right	probably not	probably not
Glen Shaulis	R.D. 1, Windber, Pa.	8 mi. E. of Berlin, Somerset Co., Pa.	Dec. 1, 1958	about 120 lbs.	spike?		probably not
William L. Wood	24 Chestnut St., Montrose, Pa.	7 mi. N. Montrose, Susquehanna Co., Pa.	Dec. 1, 1958	125 lbs.	8 points	no	no
Walter Klein	R.D. 2, McDonald, Pa.	16 mi. NE Orhisonia, Juniata Co., Pa.	Dec. 1, 1958	110 lbs.	2 spikes from 1 socket on left side; none on right	yes	yes
Joan Betts	R.D. 2, New Florence, Indiana Co., Pa.	3 mi. NW New Florence, Indiana Co., Pa.	Dec. 6, 1958	125 lbs.	1 spike on right side 7 in. long. None on left side.	yes	probably yes
Michael Rocca	124 S. High St., Fayette City, Pa.	3 mi. S. Colgrove, McKean Co., Pa.	Dec. 1, 1958		spikes 3-4 in. long	yes	no
Norris Mercer	2853 Hemlock St., South Park, Pa.	2 mi. N. West Hickory, Forest Co., Pa.	Dec. 1, 1958	115 lbs. hog-dressed (weighed at locker plant)	1 spike on right side, 9 in. long	yes	yes
Kenley Hampton	Chester, Maryland	nr. Chestertown, Kent Co., Maryland	Dec. 6, 1958	135 lbs. hog-dressed	4 points on left, 18½ in. long; right, 3 points, 14½ in. long	no	no
Unknown		Huntington Co., Pa.	Dec. 1958	no information			
Mike Kauffman	#333 R.D. 2, Pottsville, Pa.	7 mi. S. Branchdale, Schuylkill Co., Pa.	Dec. 6, 1958	80 lbs. hog-dressed	spikes 5½ in. long	no	no
Ronald Rice	Farmington, Pa.	18 mi. E. Uniontown, Fayette Co., Pa.	Dec. 13, 1958	130 lbs. hog-dressed	8 points	no	no
Harley Hinkel	Twin Lakes, Pike Co., Pa.	8 mi. N. Milford, Pike Co., Pa.	Dec. 17, 1958	60 lbs. hog-dressed	about ½ in. long; not through hair		no
Steven Zvonik	702 Oak St., Johnstown, Pa.	Old Tram Road, above Knocker Hts., nr. Johnstown, Cambria Co., Pa.	Oct. 9, 1958 (bow and arrow season)	no information			



# The Maid Of Blue Rock

By Don Neal

**H**UNTING in southern Elk county may not be as good today as it was in 1806. For although one can see as many deer and bear, grouse and rabbits, even wild trukey in flocks, as they can anywhere else in our highly favored Commonwealth, there is little chance of bagging a fine specimen of the particular species that General John Wade brought back from one of his hunting trips at that time. It you could, and if such a prize might be had in the forests of Elk county today, you would find the hunters gathered in such numbers that the area would be far more crowded than the dinner table at your favorite sportsman's club picnic.

Yet the story of General Wade's taking of this fine specimen is an odd one. Although he bagged the trophy



and brought it home with him, it was his hunting partner on the trip, a fellow by the name of Slade, who grabbed off the prize in the end.

The whole thing started on a crisp November morning in the year 1806 when General Wade and his younger companion, Slade, were walking through the forest near the place that later came to be known as Blue Rock. They had hunted since sun-up and already had two deer dressed out and hung on the limb of a big oak tree to be picked up when the hunt was over. The General was ahead, with Slade coming along a few steps behind. At the time, they had turned to avoid a huge patch of laurel and were climbing slant-wise along a sloping hillside when Wade saw something dash from behind a tree and dart into the laurel. He wasn't quite sure what it was that he had seen, but he was certain it wasn't "game" in the category of the animals they were hunting.

With a motion of his hand the General stopped Slade, then in a low voice told him what had happened. The two hunters talked for a few moments. At last, they decided they had flushed a young brave of the Senecas from his hiding place, for it was common for the young Indians to follow hunters, and if the chance presented itself, steal their kills. At first they wondered if he was alone. Then, assuming he was, they decided to teach him a lesson. While the General proceeded cautiously towards the point where the Indian had slipped into the laurel, Slade turned in to the thicket to cut off his flight in that direction.

When the General came to the opening in the laurel, he could see nothing. So he waited there, giving Slade a chance to get deep in the thicket. Then he moved slowly along following the turned leaves and bent twigs that marked the path of his quarry. By now, he expected the young brave to be well ahead of him. Yet he had gone less than twenty

feet along the well-marked trail when a movement in the bushes ahead of him stopped him short and he swung his rifle to his shoulder.

"Cah-ghe!" he called out in Seneca. It meant "come" and it was one of the few words of the Indians he knew.

There was a rustling of the leaves as something moved in the bushes.

"Cah-ghe!" he called out again.

Then, to his amazement, the leaves on one of the laurel bushes parted down close to the ground and a slim, badly scared Indian girl got slowly to her feet. In her primitive and savage way, she was pretty. The smooth, coppery tone of her skin glowed in the eerie half-light of the forest and her crudely made, loose-fitting buckskins showed far more of her shapely body than the men of that day were accustomed to facing. Her sudden appearance took the General completely off guard and for a time he stood stock still, completely dumbfounded.

When he finally recovered his poise, he called out to Slade. Then, while he waited for him to come, he tried to talk to the girl, but found she didn't understand even his simplest words. By motioning, he asked her if she was hungry. She made him understand that she was, so he took some food from his pocket and gave it to her. She ate it greedily. And by the time Slade came slashing through the laurel, she had finished off most of the food the General had brought along for himself.

Slade, too, was amazed and excited at the General's unusual find. But now the two men found themselves faced with the problem of what to do with the girl. Knowing the ways of the Indians as he did, the General guessed that their young captive had been involved in some caper which had caused her to be banished from her home village. This often happened among the Indians. And when the girl showed no desire to escape from them, Slade agreed that this must be the case. So, after a consid-



MODERN INDIAN MAID still lives in the area where Slade captured the young Seneca maiden who later became his wife.

erable time spent in talking, the hunters decided to give up the day's chase and take her to the General's home where Mrs. Wade could take care of her.

Mrs. Wade received the Indian girl with all the pity and compassion her holy, extremely Christian soul could muster. And within a split second she had shooed the men out of the house so that she could get the girl clothed in one of her own dresses, which, although it was far too large for the slight maiden, at least covered her bare limbs from the sight of the men-folk. This done, and as she considered all Indian names to be of pagan origin, she christened the girl "Ann" without ever asking her what her tribal name might have been. And when she was finished, Mrs. Wade felt satisfied that the girl was now enough "Christianized" to remain as a member of her household.

Ann was a good worker and Mrs. Wade found her to be a great help around the cabin where there was always work to be done. Further than this, the girl adapted herself to the teachings of Mrs. Wade and was soon

as prudish as the woman's own daughter would have been. This pleased the religious housewife. Within the year she was taking Ann with her when she went to visit with all of the good families who were her neighbors. Sometimes these homes were quite distant and they would have to stay over night, but Ann was always welcome, even in those households where the members held no liking for the usual run of savages.

Summer had passed and the second long winter since Ann had come to live with the Wades was getting well along when those who were interested enough to notice saw that Slade was paying more than passing attention to the dark-skinned, ever-smiling Ann. At first the two of them would just sit in the corner and shell corn together, or Slade would hold the hanks of yarn while Ann rolled them in to a neat ball ready for the knitting. But before spring had come, Slade was finding excuses to go with Ann to the outside cellar when she went for apples on a winter evening, and he would be close by her when they sat down with the Wades to much on the fruit before the log fire in the fireplace. Something definite might have come of this association at this time, but before it did Spring came and Slade got caught up in the hard work of a busy summer.

This affair between Slade and Ann ebbed and flowed in its intensity over the next two winters. Then in the spring of 1809 the two were married with an Indian chief by the name of Tamsqua performing the ceremony. For although Ann had lived as a Christian with the Wade's she still held to the religion of her forefathers and the friendly chief was more than pleased to marry them according to the ritual of the Long House religion.

Once married, though, Slade decided to give up the life of a wandering hunter and trapper. He had, for some eleven years now, followed the game trails and his trap lines wherever they led him and in the course



of those years they had kept him away from his home for long periods of time. He was as familiar with the wild plateau that lay at the headwaters of the Allegheny as he was with the broad, level flats of grassland at Chinc lacamoose (Clearfield) where the buffalo had once fed, but now the deer and elk grazed in large numbers. His canoe had traveled on the waters of many streams; streams that run both to the east and the west. And he had slept a thousand nights in bough-shanties, hurriedly thrown up where-soever he happened to be in the wilderness, and a hundred or more nights in the bark-houses of friendly Indians. It was no life, he knew, for a man with a new wife. Now he wanted to settle down and build himself a cabin, and do the kind of work that would keep him there with Ann.

But Slade had too long been a hunter and trapper to take up life as an ordinary settler. The thought of clearing land and planting crops didn't appeal to him. But he knew that the country around No-man's creek would soon be opened up by settlers who would clear the lands and plant crops, so he decided to establish a trading post there and wait for them to come. Ann liked the idea when Slade told her about it, and Chief Tamsqua offered to be his assistant.

Establishing a trading post in such an out of the way place wasn't going to be an easy task, Slade soon learned. Bringing his merchandise in from Olean, to the north, would mean having to pack them on horseback over many miles of rugged mountain trails. Besides, there was hardly a market there for the trade items, dried meats and cured skins, he would have to offer in payment for his supplies. This left Slade with only one alternative, to build a boat-canoe and make the long trip downstream to Fort Pitt, for at this river port there was a great demand for his trade items and a

wide supply of merchandise for his trading post.

The building of the boat-canoe took a little better than two weeks. But when it was finished, it was a craft of such sturdy construction that it would carry the three of them; Slade, Ann, and Tamsqua; and roughly figuring, another three-quarter ton of cargo. Slade and Ann loaded the craft with dried meats and cured skins while Tamsqua was still coating its sides with the "lucky" red paint the Indians made from iron-heavy soil they dug from their paint-holes. And while Slade good-humoredly suggested Tamsqua was wasting his time at the task, both Ann and the old Chief assured him it would add to the speed and fortune of their journey. Knowing the Indian's staunch belief in such things, Slade let the matter drop.

A few mornings later, they started off on their trip to Fort Pitt. Tamsqua poled from his place in the bow, Ann rode atop the piled skins in the boat's middle, and Slade poled at the stern. When they started out the

INDIAN LEATHERCRAFT is still practiced by modern day Senecas. Their skill is well illustrated in these beautiful handbags, necklaces and belts.



stream was narrow and full of snag-rocks, so their progress was both slow and cautious. But as they went along, the stream widened and they were soon going along with little difficulty. This was slight comfort to Slade though, for he knew that on the return trip they would have to pole the boat-canoe against the fast-running current that now carried them along with so little effort. But the first day they did cover a good distance. They camped that night, after beaching the boat at the mouth of a small stream, not too far up from where they would enter on the big waters of the Allegheny.

But Slade's troubles only started when they did bring the boat-canoe out on the broad belly of the Allegheny, for Indian-like, both Tamsqua and Ann insisted on stopping to visit with each of the Indian groups they met on their way down this heavily traveled stream. And Indian-like, they would let these little visits draw out into long, unhurried stavs; for no Indian had ever learned to count time when he stopped to "oi-hes-tah" with a brother tribesman he chanced to meet as he traveled in the wilderness.

As a result, they were six days in reaching Fort Pitt. But once there, Slade hustled into the business of trading his dried meats and cured skins for axes, salt and gunpowder; those things which would be most needed to stock his trading post at No-man's creek. And while Slade bargained with the tradesmen, Ann and Tamsqua had the time of their life seeing the sights about the fort and mingling with other Indians, many of them coming from strange tribes who lived in far off places. This was Ann's first trip to the fort, and Tamsqua had not been there in many summers.

The return to the No-man's creek country was a long, hard, tedious journey. Every foot of progress over the more than one hundred miles that lay between Fort Pitt and their destination was paid for with the la-

bors of the boatmen, as they pushed the boat-canoe forward with their long poles or waded the riffles pulling the craft behind them. Yet they experienced no more difficulties than they had anticipated and within due time arrived at Slade's trapper's cabin not a great distance from Blue Rock.

At the cabin the travellers stored Slade's merchandise, then moved on upstream to a place well known to Slade because it was a favorite wintering spot for the many herds of elk that roamed the area. He had hunted here many times and considered it to be an ideal location for his trading post. On arrival, they built a boughshanty to live in, then Slade and Tamsqua started the construction of a log cabin which would be suitable to serve as both a home and a wilderness store. By fall they had it completed. It stood somewhere on the flat land at the mouth of Bear Creek and was undoubtedly within the limits of what is now called Portland.

After the establishment of the trading post (the first business of any kind in Elk County) the historical facts concerning Slade and his native wife become quite hazy. It is possible that the opening up of the country was too long in coming and he was forced to return to hunting and trapping as a means of livelihood. Or perhaps, the free life of a hunter-trapper was too inviting and after a spell of being tied down Slade again answered the call of the winding game trail. But regardless of what the reason was, Slade's trading post never made a memorable name for itself in the annals of the wilderness country. Slade himself, though, did alright. In the first place, he was one of the two men (Gen. Wade was the other) who first settled in what is now Elk County. And, of course, he is one of the few men since the Stone Age who went out in to the forests and actually caught a wife. If for no other reason than this, he will long be remembered.





# The Case of the Vanishing Hound

By Francis W. Kemp

**A**RE YOU one of the unfortunate sportsmen who have lost a dog, seemingly without trace, on a rabbit or coon hunt? Have you laid your coat carefully on the ground where you parked your car and returned in the morning to find your hound safely snoozing beside it waiting your return? It's a grand feeling to see him greet you with his tail wagging joyously but when your coat is undisturbed and no dog is in sight, your work is cut out for you if you desire ever to see your pet again.

A number of possibilities present themselves and all should be examined. No stone should be left unturned in your efforts to recover a valued ally and friend.

First, he could have been shot by another hunter. True, that's not likely on a coon hunt but happens entirely too often in tall grass on a rabbit hunt.

Second, if your hound is a male he could have wandered off chasing a female in heat. However, if this happened you should have received a

telephone call from the owner of the female, provided you had the foresight to place your phone number on his collar along with your name and address. If you neglected this chore an ad in the lost and found column of the local newspaper may produce results. An announcement on the radio may also be helpful. In some areas this service is free . . . check with your local station.

Third, he could have been stolen by another hunter. There are not many of these human skunks around but they do exist. Your chances of recovery are slight in this case until after the hunting season when the culprit may kick the dog out in order to save feeding him until the next hunting season when he will steal another hound.

If all valuable hounds were tattooed by their owners it would serve to discourage men who deliberately steal dogs with the intent of selling them in another section of the country. Individual markings would also tend to end organized dog stealing

rings that illegally supply animals to laboratories for experimental work. Dog owners cooperating in a tattooing program could make dog stealing as hard to conceal as cattle rustling.

Fourth, your dog could have been caught in a trap or snare. In this event he will either be released by the trapper or slowly starve if the trap is not visited at the intervals required by law. If you suspect the dog has been caught, you may confirm this and save yourself quite a lot of time by contacting the property owner where you were hunting. The majority of trappers request permission of the landowners in setting traps and it is often possible to find out if traps were placed on the land where the hunt took place. If you locate the trapper through the landowner it may be possible to accompany him on his rounds and recover your hound. Let the trapper remove him from the trap and observe him closely in the event that you have to do likewise yourself sometime in the future. Any trapper that traps for fox has caught dogs and often learned

the hard way what you are learning free. Don't blame the trapper for catching your dog! No trapper catches a hound on purpose and he is just as sorry about the situation as you are. In addition, the set is ruined and it takes considerable work and skill to restore it. Most trappers lift the trap, treat it again and place it in another location. Examine your hound carefully to ascertain if he needs the attention of a veterinarian. If in any doubt, take him to one as the fee charged is small compared to the replacement value of a good hound.

If you fail to locate a trapper or the landowner has no knowledge of same on his land, you are going to have to search the area in which your dog was last observed. Past experience with your dog should determine the necessity of this step. If he has the habit of taking off after deer and running them into the next county, the percentages say that is what happened this time. On the other hand, if he always returns to your call, you owe it to him to make the search.

In searching an area some knowl-





edge of where a fox trapper places a trap will be useful. Dirt hole sets which are by far the most popular and most productive are usually out in the open. Water sets are just what the name implies. In 99% of other sets the trap will be placed close to a path or old trail which foxes follow in their travel over the countryside. Snares are set in trails and are not common. However, a dog caught in a snare (not spring pole type) will generally sit quietly as though tied. This is of course desirable as he doesn't choke himself to death fighting the snare.

Let's assume that you have correctly deduced what happened to your lost dog and you have found him in a trap. Your trouble is now just beginning for unless you follow procedure used by experienced trappers you and the dog are both in for a rough time. You must remember that the dog is hurt and any movement is quite painful. All animals lash out at the nearest object when in pain and this could be your arm, face, or leg. Last Fall a hunter was severely bitten when he attempted to remove his beagle from a fox trap. He was nailed on the leg and arm deep enough to require medical care and a secondary infection put him in the hospital for treatment. This could happen to any hunter in the same circumstances. He found his dog within ten minutes of the time it was caught in the trap. The leg had not had time to become numb although the dog was sitting quietly on the trap. When the hunter reached down to ascertain the trouble he was bitten in the arm. Later when the hunter tried to release the trap by stepping on the springs he was bitten on the leg. The dog was not vicious but was reacting normally to excruciating pain.

OK, you have found your dog; now what do you do? Well, let's go back to the veteran trapper and see what he does. Art Logue, former Division Supervisor of the Pennsylvania

Game Commission and veteran trapper of many years, puts it this way . . . "To successfully release a dog from a trap without getting bit, it is necessary to control the dog's head." This sums it up in a nut shell so let's look at the various methods, always keeping the basic principle outlined by Logue in mind.

Fox traps (and the odds are 100 to 1 that is what your dog has blundered into) are almost always number 2 traps. They have either double coil springs, double steel springs, or a combination of both. These cannot be pushed down and opened by a pole or stick. The accepted method of opening the trap jaw is to place a heel on each spring and then put your full weight on the same and the jaw will open easily. To release a dog in a trap you must straddle the dog to properly place your heels and this is where you must have the dog's head under full control. Some trappers carry a heavy piece of an old tarpaulin when they are operating in an area where they suspect they may catch a few dogs. They immobilize the hound by covering his head and pinning him down. They move fast, free the dog, and jump back out of the way. The dog will release himself from the trap and usually run away. On occasion, a sassy hound will charge the trapper and an experienced man always has a stout club to ward off such an attack if forthcoming. Some trappers cut a heavy forked stick and run it through the collar to pin the dog to the ground. The dog is then straddled and released as usual. Art Logue used a method in trapping live coon that could be used effectively in releasing dogs. He carried a length of lead pipe and put a doubled wire through it to form a noose in one end. This was slipped over the head of the coon and held securely while the trap jaws were sprung open in the usual manner. Not many rabbit or coon hunters carry lead pipe or tarps so

the forked stick method can be used if one can be located that is suitable. If not, sometimes a hunting coat can be used . . . remove all shells before starting and don't expect to get your coat back undamaged. Slipping a dog's head into the arm hole can be done at times but work cautiously!

The method used by sportsmen who doctor a dog which lost an argument with a porcupine will also work with a dog in a trap. In removing porcupine quills it is necessary to slip a noose behind the front legs and another noose over the back legs and stretch the hound around a large tree or suitable object. The jaws are immobilized by forcing a stout stick between them and tying securely to muzzle the hound. The quills can then be removed safely with a pair of pliers. One noose will serve to hold the head of a trapped dog away from the hunter while he works on the

trap. This can be held by a hunting pardner or tied to a nearby tree if available. It is not necessary to muzzle the dog.

To be on the safe side, if no materials are available, it is better to return home for a pipe and noose or borrow something from the nearest farmer. Anything that will control the head will work. Take your time as there is nothing to be gained by haste and the dog is obviously not going anywhere. If you have a buddy with you he can help by making certain the dog is well wrapped up while you work on the trap. On rare occasions you may find the earth under the trap so soft that you have trouble opening the jaws as the entire trap sinks into the ground under your weight. If this happens, place a flat stone or piece of wood under the trap and it will spring open when you place your heels on each end.







# CONSERVATION NEWS



## Harvey A. Roberts Named Commission Research Chief

The Pennsylvania Game Commission has named Harvey A. Roberts as its Chief of the Division of Research. He replaced Glenn L. Bowers who recently was appointed Deputy Executive Director.

The new research chief was born in Harrisburg in 1922 and completed two years at the Pennsylvania State University before entering the service in 1942. Following his discharge from the Army's amphibious engineers, he entered the University of Alaska where he majored in biological sciences and received his bachelor's degree. In 1952 he returned to the University of Alaska and studied for a Master's degree in Wildlife Management.

Mr. Roberts joined the Commission in 1948 as a biologist assigned to the mammal survey project. Since that time he has served as leader of the mammal survey, acting chief of research, and leader of the wild turkey study. He was working on the last mentioned investigation at the time of his appointment as Chief of Research.

He makes his home in Harrisburg, where he resides with his wife, Virginia, and their two children.

## Safety Zone Signs Prove Key To Open Hunting Land

Over one-quarter million acres of Pennsylvania land will be open to hunters this fall as a result of a Game Commission program. The program, conducted in the interest of better farmer-sportsman relations, is simply this: Landowners with 50 or more acres in their farms are contacted by Commission representatives, usually the District Game Protector. In return for keeping their lands open to public hunting, they are given Safety Zone posters and are also provided with a free subscription to "Game News". The posters warn hunters that shooting within 150 yards of farm buildings is unlawful and grant the farmer and his family a degree of protection that apparently is overcoming one of the main objections to permitting public hunting.

Last year 248,201 acres of privately owned land, mostly agricultural, were opened to hunting or continued unposted against trespass through this mutually beneficial arrangement. Involved were 1,771 properties. None of these farms are enrolled in the Commission's Cooperative Farm-Game Program which utilizes safety zone signs and magazine subscriptions but is much more extensive and formal.

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## 1959 CONSERVATION DIRECTORY AVAILABLE

The 1959 *Conservation Directory* which lists the names, addresses, and titles of more than 700 national, regional and State conservation agencies and organizations and key personnel in the American hemisphere, is available from the Educational Servicing Section, National Wildlife Federation, 232 Carroll Street N.W., Washington 12, D. C., at 50 cents a copy.

## SALE OF HUNTING LICENSES IN 1958 SETS NEW RECORD FOR PENNSYLVANIA

During the twelve-month period ended August 31, 1959, the issuance of hunting licenses for Pennsylvania totalled 985,070. This represents the greatest number of hunting licenses ever issued in the Keystone State since such licenses were first required in 1913. The sale of both resident and non-resident licenses set all-time records—943,340 hunting licenses were issued to residents of the Commonwealth while 41,730 non-resident licenses were issued. The total number of resident hunting licenses includes 856 free licenses issued to resident disabled war veterans as required by law; the sale of non-resident licenses includes 17 issued to alien non-residents.

During the 1957 license year 970,517 Pennsylvania hunting licenses

were issued; in 1956 the total was 938,064.

The "regular" hunting license is required for any person 12 years of age or older (except farmers hunting on their own or adjoining land) to hunt any wild bird or animal in Pennsylvania. During the 1958 license year, new records were also set in the issuance of additional licenses required by law for the hunting of deer during the archery season (72,937) and for the hunting of antlerless deer (349,054). The only other type of hunting license issued in Pennsylvania is a special 3-day license available to non-residents hunting on regulated shooting grounds only. Last year 2,830 of these short term licenses were issued.

NEW OFFICERS of the Pennsylvania Federation of Sportsmen's Clubs, elected during the annual convention in September, are, left to right: Everett G. Henderson, 1st vice-president; Warren "Barney" Singer, 2nd vice-president; Charles Nehf, Secretary; Oscar A. Becker, President; Jim Sheffer, Alt. Delegate to National Wildlife Federation; and Seth Myers, Delegate. Glen C. Dodds, Treasurer, was not present when photo was taken.

Photo by C. Paul Blair





## RESIDENT AND NON-RESIDENT HUNTERS' LICENSES ISSUED BY COUNTY

COUNTIES	RESIDENT		NON-RESIDENT	
	1958	D.V.	1958	1957
Adams	7,716	( 2 )	655	603
Allegheny	77,313	( 38 )	139	197
Armstrong	13,574	( 8 )	212	217
Beaver	18,292	( 13 )	392	357
Bedford	9,519	( 9 )	839	696
Berks	25,282	( 23 )	74	67
Blair	17,485	( 17 )	270	292
Bradford	9,792	( 9 )	800	822
Bucks	18,291	( 15 )	848	913
Butler	15,798	( 16 )	157	169
Cambria	24,975	( 17 )	406	434
Cameron	1,806	( 2 )	404	433
Carbon	6,995	( 8 )	131	124
Centre	13,447	( 10 )	235	244
Chester	17,211	( 12 )	832	746
Clarion	9,613	( 10 )	939	942
Clearfield	14,895	( 20 )	718	809
Clinton	8,170	( 14 )	235	244
Columbia	9,574	( 4 )	131	142
Crawford	14,701	( 17 )	1,328	1,216
Cumberland	16,569	( 14 )	79	79
Dauphin	21,375	( 30 )	184	159
Delaware	13,526	( 14 )	271	235
Elk	6,995	( 4 )	536	613
Erie	25,379	( 20 )	1,005	1,042
Fayette	18,720	( 30 )	286	275
Forest	2,718	( 4 )	777	1,005
Franklin	13,028	( 9 )	534	510
Fulton	2,770	( 9 )	304	261
Greene	5,337	( 3 )	199	160
Huntingdon	8,865	( 25 )	310	240
Indiana	12,309	( 12 )	394	432
Jefferson	10,804	( 22 )	819	807
Juniata	3,832	( 4 )	64	90
Lackawanna	15,202	( 23 )	266	319
Lancaster	29,537	( 18 )	178	154
Lawrence	11,994	( 7 )	1,832	1,732
Lebanon	10,854	( 10 )	57	35
Lehigh	16,240	( 10 )	118	109
Luzerne	28,389	( 28 )	760	685
Lycoming	18,248	( 14 )	330	352
McKean	9,883	( 7 )	2,185	1,878
Mercer	17,344	( 6 )	2,752	2,902
Mifflin	8,393	( 13 )	193	199
Monroe	7,848	( 9 )	725	692
Montgomery	25,731	( 14 )	78	84
Montour	2,395	( 3 )	20	24
Northampton	16,943	( 14 )	838	804
Northumberland	13,296	( 19 )	99	126
Perry	5,577	( 7 )	65	46
Philadelphia	26,216	( 16 )	817	759
Pike	3,385	( 3 )	2,599	2,421
Potter	3,856	( 8 )	1,213	1,189
Schuylkill	20,083	( 17 )	188	154
Snyder	4,579	( 6 )	47	30
Somerset	13,621	( 25 )	607	577
Sullivan	1,816	( 4 )	111	119
Susquehanna	5,644	( 1 )	793	678
Tioga	8,061	( 6 )	894	768
Union	4,390	( 9 )	96	111
Venango	10,717	( 16 )	1,007	1,072
Warren	7,298	( 13 )	1,781	1,547
Washington	23,406	( 18 )	783	739
Wayne	5,327	( 13 )	1,131	1,109
Westmoreland	38,443	( 26 )	237	224
Wyoming	3,515	( 1 )	203	183
York	27,289	( 8 )	1,010	864
Dept. of Revenue	1,144	( — )	2,210	2,261
Totals	943,340	(856)*	41,730**	40,527**

\* The Figures in parentheses indicate "Free Licenses" issued to Resident Disabled War Veterans, which are included in column of "Resident Licenses."

\*\* Includes Allen Non-Resident Hunters' Licenses as follows: 1958, 17; 1957, 9.



REVOLVER CHAMPION of the Game Commission Earl Geesaman of the Southeast Division, Reading, receives a Colt Cobra from Mike Teders, right, Colt Firearms Company representative as Executive Director M. J. Golden looks on. Geesaman, a Conservation Information Assistant in the field division headquarters, fired 288 out of a possible 300 with his service revolver to win top rating among Commission field officers.

## **Pennsylvania Game Protectors Score Well With Revolver**

It is rather expected that wildlife men will be proficient with the rifle and shotgun, but their ability with the handgun may be overlooked. As part of the training program of the Pennsylvania Game Commission all Game Protectors practice shooting the service revolver and annually compete in inter-division matches. Records show the statewide average of these officers has risen markedly in the last few years. Scores fired in recent matches indicate the improvement continues.

The Game Protectors of the Northeast Division won the Supervisors' Trophy this year with the high average of nearly 222 points out of a possible 300. The North-central and Southeast Divisions rated close second and third in this category, in that order. To learn which Division wins this prize, the scores of all the officers in a Division are totaled and an average is struck.

The team scores (top five men in each Division) for the President's Trophy found the Southeast Division the winner with 1,350 points out of a possible 1,500, which is an average of 270 per shooter. The Northeast

gave the 1959 champs strong competition, and the Northwest took third place honors.

In Earl Geesaman of the Southeast Division the matches brought forth a new statewide champion among the Game Protectors. To rate the distinction he scored 288 out of a possible 300. Edward Fasching from the same Division shot only 4 points lower as runner-up. George W. Miller of the Northwest Division fired a 278 for third place, and Daniel McPeck, Jr., Northeast scored 274 in taking fourth. William Fulmer, also of the Northeast Division, tallied a respectable 272 for fifth-place.

## **Six Pass Taxidermy Exam**

The Game Commission announces that the six applicants who took the taxidermy examination at Harrisburg on June 25 passed the tests and may now be licensed to mount birds and animals in the Commonwealth.

The names of the Pennsylvania men and their addresses follow: William E. Irwin, R. D. #1, Pleasantville; Alfred J. Spoo, R. D. #4, Lititz; Harry J. Smith, Jr., Tyler Hill; Casimer Penkauskas, Gradyville; Luther M. Anderson, R. D. #4, Waynesboro; and James A. Enders, South Edward Street, Lykens.



## QUEHANNA OPENED TO DEER HUNTERS

The Curtiss-Wright Corporation, in cooperation with the Pennsylvania Game Commission, will this year open its Quehanna site to deer hunters starting with the bow and arrow season, October 3 through October 30, during the antlered deer season, November 30 through December 12, and the antlerless deer season, December 14, 15 and 16. The area is located principally in Southern Cameron County, in northcentral Pennsylvania. Licensed hunters are eligible to participate within certain necessary regulations which have been established by the Corporation.

Curtiss-Wright will issue daily permits to hunt on the property to the first 300 hunters applying each day at the Quehanna site entrances. Gates will be open from 6:00 to 7:30 a.m. and from 8:30 to 9:30 each morning the seasons are in effect. Gates will be closed to hunters from 7:30 to 8:30 a.m. to permit employees ready access to the property. All hunters will be required to be off the Curtiss-Wright property each hunting day at 6:00 p.m.

Deer hunters can reach the property via the Wycoff and Medix Runs and from Karthaus only. From each of these entrances they will be directed to a central point for registration, issuance of permits and parking facilities. Field officers of the Game Commission will patrol the area. Permits will be checked during the day by Quehanna guards and the

Commission officers and are to be returned when leaving the premises.

Bow and arrows and shotguns using slugs are the only weapons authorized for hunting on the Quehanna property. Due to the high velocity and long range of bullets shot from rifles and hand guns these firearms will not be allowed on the property. "Still" hunting only will be permitted; "driving" deer by hunting parties will not be allowed.

While most of Curtiss-Wright's property at Quehanna will be open to the 300 hunters daily, security reasons make it necessary that certain areas on the property be restricted. There are costly and highly important installations on the grounds. At the time of registration hunters will be given maps of the property with the hunting areas clearly established. No hunting will be allowed in any of the restricted areas. Hunting on the area this year is in the nature of an experiment and the future use of the grounds will depend on the behavior of hunters there during the three 1959 deer seasons.

In addition to the regulations established by Curtiss-Wright, all regulations of the Pennsylvania Game Commission and the provisions of the Pennsylvania Game Laws, as well as the rules of good sportsmanship must be observed on Quehanna, say officials of the Corporation.





PGC Photo by Batcheler

OPEN HOUSE at the Game Commission Training School near Brockway attracted more than 300 visitors on September 13. Student officers and staff greeted the visitors, many of whom came from great distances and some from out-of-state, to see the classrooms, grounds and other modern facilities.

## INDIANTOWN GAP MILITARY RESERVATION OPEN TO HUNTING BY PERMIT THIS YEAR

Hunting will be permitted on most of the huge Indiantown Gap Military Reservation in Lebanon and Dauphin Counties during the major game seasons this year, with certain restrictions. The Pennsylvania Game Commission has concluded an agreement to this effect with the Headquarters of the United States Army Garrison, Indiantown Gap, and the Pennsylvania Department of Military Affairs.

Requirements for hunting on the approximately 8,000 acres open in the area are these: Persons possessing a valid Pennsylvania hunting license will be permitted to hunt small game and large game during the prescribed seasons after obtaining a weekly permit. The permits will be issued without cost, 24 hours daily, at the Military Police Station, Building S-7-37, which is on Route 343 in the Barracks and Administration area. Any temporary restrictions necessitated by military activity will be noted at the time the permit is issued. Instructions and pertinent information are printed on the map which shows the no-hunting zones, which are the barracks and administration area, the ammunition

dump and the Army firing areas. The restricted zones will be well marked.

Persons who fail to obtain permits or who violate any of the restrictions will be denied future hunting privileges. Penalties for violating the restrictions are severe, and those at fault will be tried before the U.S. Commissioner.

Gap officials are greatly concerned about hazards involved in hunting on the Military Reservation, particularly in the impact area where unexploded shells could be dangerous to anyone venturing into the closed territory.

Persons anticipating hunting on the Indiantown Gap Military Reservation are admonished to obtain a permit before doing so and to be careful of their behavior so that hunting there in time to come will not be jeopardized.

The agreement with the Gap officials authorizes Game Commission personnel access to the area in order to enforce the Game Law. Also the Commission will be permitted to improve wildlife conditions on the area, when the authorities there concur.



## 13 State Parks Opened To Hunting This Fall

Selected areas in Pennsylvania's State Parks will again be open for hunting during the bow and arrow and regular gunning seasons, according to Secretary of Forests and Waters Maurice K. Goddard.

Goddard stated that controlled hunting in the parks has been permitted in the past in the interest of proper game management and in order to provide additional opportunities for sportsmen.

Signs clearly indicating "no hunting" will be posted at regular intervals in the parks at points where gunning is prohibited in order to safeguard non-hunters using park facilities during the hunting season.

Goddard cautioned that "strict law enforcement of all park regulations will be observed. Violators of laws governing use of State Parks are subject to a maximum fine of \$100 for each offense or thirty days imprisonment, or both."

"Maps of the hunting areas in 13 of the larger State Parks have been prepared by the Division of State Parks," Goddard stated, "and are available from the Park Superintendents, District Foresters, and State Forest Rangers." Maps have been prepared for:

- Chapman State Park—  
Warren County
- Big Pocono State Park—  
Monroe County
- Cook Forest State Park—  
Clarion, Forest, and  
Jefferson Counties
- Raccoon Creek State Park—  
Beaver County
- Laurel Hill State Park—  
Somerset County
- Blue Knob State Park—  
Bedford County
- Keystone State Park—  
Westmoreland County
- Shawnee State Park—  
Bedford County

- Ricketts Glen State Park—  
Luzerne and Sullivan Counties
- Tobyhanna State Park—  
Monroe and Wayne Counties
- Crooked Creek State Park—  
Armstrong County
- French Creek State Park—  
Berks and Chester Counties
- Hickory Run State Park—  
Carbon County

The Forests and Waters Secretary explained that an annual study of wildlife on State Park lands is made to determine game population, feeding habits, flora damage, and wildlife health. From this study, the park areas which may be hunted are determined.

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## Colorful Schoolbook Covers Launch Second Good Outdoor Manners Contest

The second phase of the Good Outdoor Manners educational campaign being conducted by the Pennsylvania Forestry Association features an attractive four-color schoolbook cover. The covers carry an announcement of the second HOWDY contest and an entry blank.

This new contest is open to all students enrolled in grades one through 12 in any school within Pennsylvania, either singly or in groups. The purpose is to obtain a pledge pertaining to the slogan "Have Good Outdoor Manners." Pledges will be judged on: (1) recognition of the various forms of outdoor recreational activities; (2) originality; (3) conciseness; (4) neatness; and (5) spelling. All entries must be mailed to The Pennsylvania Forestry Association, P. O. Box 389, Ardmore, Pa., and must be postmarked no later than March 15, 1960.

The book covers are printed on tough Kraft paper and the picture on the front originally appeared as the front cover on the June, 1959 issue of "Pennsylvania Game News."

## COMMISSION STARTS EDUCATIONAL PROGRAM TO ENCOURAGE WIDESPREAD PREDATOR CONTROL

Agencies charged with wildlife management strive to maintain a balance in nature through the setting of game and fur seasons and the control of birds and animals which prey on game. But low fur prices and developments accompanying improvements in our mode of living have complicated the game management picture.

To lessen the inroads of noxious creatures in Pennsylvania all Game Protectors have been directed to hit hard on the predator program every month of the year as duties and available time permit. In recent years the officers have taught many men the art of trapping the principal enemies of our wild game. Following such instruction farm boys too have often proved capable of removing winged and four-footed raiders from home localities where they have caused poultry or livestock loss.

Game Protectors are presently scheduling public meetings at which Paul Failor the Commission's Predator Control Agent will appear. At such gatherings Failor will lecture on predacious birds and animals found in Pennsylvania and will demonstrate methods and devices used in taking them. There is no charge for this service. Persons who wish to learn ways to trap predators or call them within gunshot range are urged to take advantage of this opportunity. The Game Commission booklet on the subject, TRAPPING AND PRE-

DATOR CONTROL METHODS, will be available at the meetings. It contains a wealth of information that will benefit the novice trapper particularly.

Failor lists the raccoon, the opossum, the fox and the skunk "the big four" among the predators in the Commonwealth today. Conditions vary, locality to locality, he points out and usually a combination of these animals makes serious inroads on the small game populations. Of course, the crow looms large as a destroyer of nests of farm and forest game birds and waterfowl. He states, too, that in localities where the great-horned owl is out of control it is a great factor in reducing small game numbers, particularly the cottontail rabbit and other species that travel at night or in twilight hours.

In some localities Nature has employed disease to control an over-population of certain predators, but where disease has not reduced the egg and game eaters man must do the job in the interest of game survival and better hunting results.

One of the principal purposes of the meetings at which predator trapping and calling will be demonstrated is to inform Pennsylvania sportsmen and farmers as to current wildlife conditions and enlist their help in reducing the number of the serious offenders against wild game.

## TURN IN THOSE TAGS!

Hunters who bag any bird or animal bearing a metal or plastic tag or band are in a good position to help themselves to better hunting in the future by merely sending the tag (with date and location of kill) to the Game Commission's Division of Research at Harrisburg. The information gained from band returns greatly facilitates the planning and other operations in Pennsylvania's modern game management program. Commission biologists conduct regular banding and study of ducks, some ringneck pheasants, wild turkeys and rabbits. They need your help in finding out many things about these species—how long they live in the wild, how far they travel and where they go. For better hunting, return those bands the same day you are lucky enough to bag a marked bird or bunny.





WALTER HASKINS MEMORIAL PLAQUE was presented recently to Mrs. Haskins by officials of the Elk County Federation of Sportsmen's Clubs in memory of outstanding work done by her husband in the cause of conservation. Left to right: Harold Davis, Conservation Chairman of the Division; Kermit Sandberg, secretary-treasurer; Floyd Oyler, president; and Sam Guaglianone, vice-president.

### **No Bounty Payments Between Oct. 31-Dec. 31**

Persons who might otherwise forward bounty claims for foxes and great-horned owls killed during the latter part of this year are reminded of the Game Commission resolution on the discontinuance of such payment then. The gist of the authority's decision, which followed full consideration of predator conditions in Pennsylvania, was this:

The \$4 bounty for each gray fox and each red fox and the \$5 bounty for each great-horned owl, killed in a wild state in the Commonwealth and presented in the manner prescribed in the Game Law, would be continued during the authority's fiscal year beginning June 1, 1959 with this exception: *Bounty will not be paid* on the foxes and the owl named if killed during the period beginning October 31 (opening date of the small game season) and ending December 31 this year.

However, valid bounty claims for foxes and great-horned owls *killed*

*prior to October 31, 1959* and presented within the time the law stipulates will be paid upon receipt at the Harrisburg office of the Game Commission, as formerly. (Great-horned owls must be presented or shipped to the Game Commission within 48 hours after killing, fox skins within 4 months.)

The Commission removed the bounty during the days between October 31, 1959 to January 1, 1960 because the high percentage of the predators killed during the major game seasons, in effect at that time of year, are incidentally shot by hunters who come upon them while seeking other wildlife. In such case the reward does not serve the intended purpose, that of providing an incentive for trappers and hunters to make special efforts to reduce the number of noxious creatures as an aid toward more adequate game populations. The bounty of Great-horned owls has been discontinued during the late months in each of the last few years.

## Expensive Pheasant Shooting

Quite a number of persons who declared for themselves an early small game season in southeastern Pennsylvania this year wish they hadn't, says Morris Stewart, Game Commission Division Supervisor in that corner of the state.

Stewart reports that Game Protectors have already apprehended numerous preseason hunters, but says a late September pheasant case tops any so far. Here is the story: Five Maryland men drove into York County on the afternoon of September 29 and proceeded to hunt ring-neck pheasants. None of them possessed a Pennsylvania non-resident license, the birds were shot from the auto in which the men rode, and a .22 caliber semi-automatic rifle (an illegal hunting device) was used. The men toured country roads and killed 5 pheasants—4 cocks and 1 hen—before Game Protector Gerald Kirkpatrick apprehended them and ended their spree.

Arraigned before a justice of the Peace, the five hunters from "south of the border" learned that shooting ringnecks in closed season—and with about everything else wrong about the hunt—can be costly. When the penalties were totaled the fines averaged \$160 per man, plus costs.

**STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF**

**PENNSYLVANIA GAME NEWS** published monthly at Harrisburg, Pennsylvania for 1959.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Pennsylvania Game Commission, Harrisburg, Pennsylvania; Editor, Willard T. Johns, Jr., Harrisburg, Pennsylvania; Managing editor, None; Business manager, None.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given. Commonwealth of Pennsylvania, Pennsylvania Game Commission, Harrisburg, Pa.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

WILLARD T. JOHNS, JR.,

Editor.

Sworn to and subscribed before me this day of October, 1959.

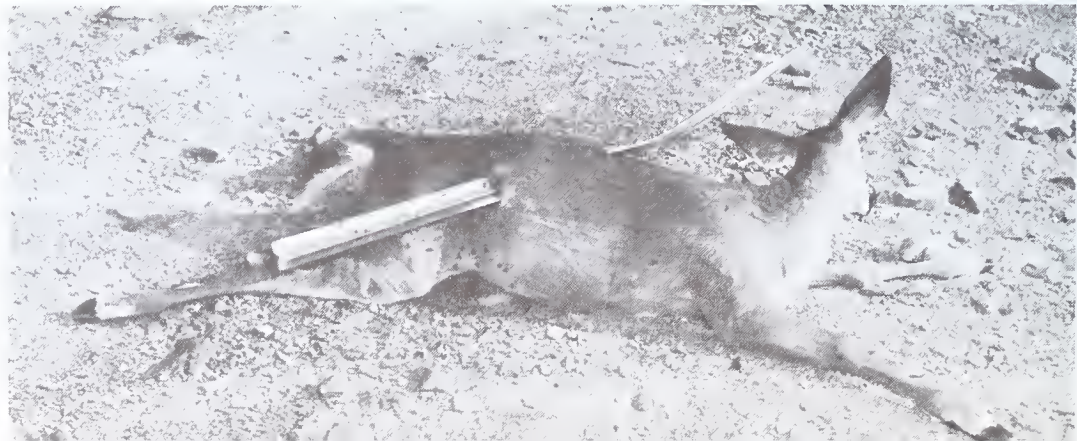
(Seal)

HOMER C. BRADLEY,

Notary Public.

(My commission expires May 8, 1963.)

**FREAK ACCIDENT** resulted in this highway-killed deer. The doe was hit on Route 940 near Brady Lake on September 22 and was "speared" by the chrome trim strip from the side of the car. Game Protector John Spencer found the dead animal a short time later but still hasn't heard from the owner of the trim-less car.







# From Woodcock To Bears

By Jim Varner

**O**CTOBER'S pageant of bright colors has left us, summer's green lushness is only a memory, but to the outdoorsman who has an understanding heart, there is plenty of beauty left in November. This is the "brown" month—the interlude between October's glory and the grayness of winter. November is the introduction to winter, but to the shotgunner it means days afield for practically all varieties of small game as well as a week long season for black bears. So let's take a quick look at shotgun possibilities and capabilities from woodcock to bear.

**Rabbits:** Here is the "big game" for the "small boy" and certainly the bouncing cottontail is the most popular game animal in America. Barring too many unexpected variables which often decrease rabbit populations sharply from the high peaks of summer, rabbit hunters should find good sport, especially with a good rabbit hound to help them. The cottontail's normal death rate, however, is tre-

mendous. He is the "filet mignon" on the menu for many predators. These same predators, with assistance from stray housecats, weasels, skunks, raccoons and opossums take their toll of all our ground nesting game such as quail, ringneck, grouse and even wild turkey. There is no closed season on them. They test your hunting know-how and ability to hunt and stalk wildlife. So, if you don't find as many rabbits in your favorite hunting grounds as you would like, why not plan now to try a few predator hunting trips in the area next winter and spring. It's fun and it also may mean a marked difference in next year's supply of small game.

**Squirrels:** About the only small





**HUNT FROM THE PAST** is pictured here. Gun columnist Jim Varner and his friends posed with the results of a two-day hunt in Pike County 30 years ago when Pennsylvania had less than 250,000 licensed hunters and the limit on grouse was 5 per day.

game animal that seems to thrive where there is an abundance of hunters and predators is the squirrel. Bushytail gets quite cunning and alert after he has escaped a few close calls with the 22 cal. rifle or some shot charges. Pennsylvania has several species, with the gray squirrel being the most common. The big fox squirrel, or western fox squirrel as it is called, ranges the southcentral and western areas of the state but it is not abundant. As an Iowa farm lad, this was my favorite game animal with a good dog and 22 rifle. All squirrels are very tenacious of life and will escape to die later unless hit hard in a vital spot. They are excellent eating when properly prepared and are very clean in their habits. I have killed literally thousands of them and have never found one diseased as is so common with rabbits.

If you hunt bushytails with the smoothbore, I suggest you use medium sized shot—6, 5 or 4—in fairly heavy loads. Remove the viscera immediately and remove the hide as soon thereafter as possible. Squirrels that have been living on corn, acorns, hickory nuts or black walnuts have a flavor all their own; don't waste them.

**Woodcock:** Like myself, many hunters have probably been searching the tag alder thickets, the crab apple and hawthorne tangles as well as sweet fern and laurel heather in search of the elusive "timber-doddle" or woodcock. This frail, mysterious little denizen of the bogs does not require heavy guns or heavy loads. The lightest trap or skeet load in 7½ or 8 is enough for him. Some sportsmen like 9 or 10 shot. Light guns in 20, 16 or 12 gauge fill the bill and a good dog will add a lot to your enjoyment, as well as saving many an otherwise lost bird.

**Quail:** Guns used on woodcock are right for bobwhite quail. Although not universally numerous in our state, they are making a strong comeback, especially in the southern counties.

**Grouse:** Our state bird has earned the right to be called "king of upland game." The little drummer of the old apple orchards, sumac grove and mountain woodlands deserves all the help we can give him. Early season hunting on inexperienced young birds with a good dog requires light guns and light loads. Late season shooting usually calls for heavier loads and slightly larger shot.



Be a good sportsman and leave breeding stock in every covert.

**Ringneck Pheasant:** The big event of the upland small game season with the majority of hunters is the first day afield for ringnecks. The easily propagated "chink" has filled a need for more game to take pressure off native birds. His large size, gaudy plumage, tricky flight and adaptability to revert back to the wild makes him a very much sought after prize. He is at his best in heavily farmed agricultural areas. Many hunters go bug-eyed greedy when after this big bird but most of the old time grouse hunters consider him more or less a wild substitute that in no ways compares with the grouse as a game bird. One thing for sure, the ringneck is tough and requires a killing shot to prevent him from getting away. If there is even a spark of life left in him, you will lose him as though he just evaporated. Here is where a good dog is a great help. Use Xpress loads of 6, 5 or 4 shot in modified or full choke guns heavy enough to snub some of the excess recoil of these shells. The standard trap load of 7½'s makes a good ringneck load for early season shooting in the hands of a careful and experienced gunner. What the 7½'s lack in power, they make up for in dense pattern which usually means hits in the head and neck numerous enough to put the old cackler down for keeps, providing you stick to nothing beyond 35 or 40 yards.

The concentration of shooters in some sections where the ringneck is numerous requires keen knowledge of safety regulations and a lot of sensible application of the ethics of good sportsmanship toward the farmer who is tolerating your presence. Show him you are not a greedy game hog. If I am using a double gun when hunting ringnecks, I usually carry a light load in the right barrel to use on a bunny if he gets out or for an unexpected close shot on a slow-flushing pheasant.

The left barrel is always ready to second with a heavy Xpress or magnum load of copper-plated 5's, 4's or 3's. If I am using a repeater or auto gun, I follow about the same procedure with a trap load in the barrel to be followed by two heavies. Sometimes I miss with all of them and stand stuttering to myself, but as a rule this way of loading for mixed upland game pays off.

**Wild Turkey:** Let's talk turkey is always a good suggestion since many hunters would rather kill a big old gobbler than a deer. Many prefer the rifle for this big upland bird but we are sticking to the smoothbore here and will talk rifles at another session. If you are an expert caller, also having the cunning of a red fox and the patience of a setting hen, you may be able to get the wild turkey within easy shotgun range. Within 30 yards most any load will kill all game. Beyond 30 yards, don't be foolish enough to expect kills on the wild turkey, especially mature toms. They require Xpress or Magnum loads with at least 4's and preferably 2's or BB's. Be cautious with a wounded bird; they have a way of vanishing rapidly. Modified barrels, or preferably full choke, should be used.

**Waterfowl:** Wildfowl hunting is at its best this month, especially on migrating birds. Most of the locally raised ducks are gone and the small ponds and beaver dams are often frozen over. Flight birds which have run the gauntlet all the way down from northern Ontario, Quebec and even the James Bay area are the ones who separate the men from the boys when it comes to being a real wildfowl hunter. Few men today are capable of estimating the correct lead on a jet-propelled canvasback as he does 70 miles per hour 150 to 180 feet above you. Notice that I said feet, not yards. Few shotguns are capable of reasonable kills on such a shot and few men have enough experience to estimate within 10 yards one way or

the other the correct distance. The best shotgun made today for this work, of course, is the 10 gauge magnum using five drams equivalent and 2 to 2¼ ounces of 4's, 3's, 2's or ones, preferably copper plated shot. The even numbered shot can be purchased in factory loads. The 3's and ones you will have to buy and load yourself. The next best wildfowl gun for pass shooting and all long range work is the 3 inch 12 gauge magnum using 4¼ to 4½ drams and 1¾ to 1⅞ of shot. About the lightest gun you should carry for that 55 to 60 yard "can" is the heaviest standard full-choked gun carrying the new 2¾ inch 12 gauge magnum shells which are loaded to 4 drams and propel 1½ ounces of shot.

**Black Bear:** The biggest job our favorite smoothbore may be called upon to perform during November is bear hunting. The law requires rifled slugs or round ball only—no buck shot. Round ball is obsolete so we will feature the excellent rifled slug. Most bear hunters, of course, use rifles but the fellow who only has a shotgun should not be discouraged from trying his skill in this grand sport. But he should do some serious targeting and experimenting first, at ranges from 35 to 100 yards. I don't mean slam-bang, hit or miss off-hand

shooting. Use a sandbag rest for all ranges and squeeze off each shot as carefully as in precision rifle shooting. Shoot at least three shot groups and avoid flinching. If you are not keeping your slugs in at least seven inch groups at 50 yards with a single barrel repeater or a 10 inch group with a double, you are flinching badly and will have to carry a good luck charm of some kind pinned to your shirt-tail in the woods. New repeating 12 gauge guns are now being made by Ithaca and Remington which are excellent rifle sighted slug arms as well as fine improved cylinder guns for all small game. A new extra full or modified barrel makes such an arm a real all-around gun. Shallow open and peep sights can be installed on all shotguns. The striking energy of the 12 gauge rifled slug at 50 yards is over 1500 foot pounds. It will take the life out of the biggest bear with one shot if just half-way placed right. The 16 gauge hits 1200 foot pounds and the 20 gauge 900 foot pounds. Large diameter and soft lead construction is what makes the killing energy so terrific. The rifled slug in 12 gauge weighs around an ounce; its muzzle velocity is around 1500 feet per second but its recoil is not near as severe as the 1½ magnum shot load. So don't be afraid of it.

FOUR ACES are duplicated by this bag of Canada geese, probably the greatest game bird that flies.







# Stages of Development

By Horace Lytle

**D**OGS do not develop according to any set formula, or pattern. In which fact, I think, lies much of the interest. Some never awaken to their inheritance or potentialities. Others are slow in doing so. Still others are prodigies as puppies—but later fold up to little or nothing.

The test of training talent (if any) lies in a very subtle something of ability to “read” what the chances may be—what direction development may have to take—what form of guidance will be most likely to succeed. If it were easy much of the fascination would be lost.

Some cases seem so clear cut that, when I answer inquiries regarding them, I can feel on pretty sure ground. In other instances, I’m less certain and wish it might be possible to see the dog at first hand, instead of having to depend on a report by mail. Too, that I might know more of the master’s own ability and experience for coping with whatever his problems may be. Often the very nature of the inquiry will give some idea of this—as well as of the dog—

and in such cases my answers can be backed by more confidence.

It is not always true that a dog showing little interest for the hunt may never find it. Yet it is true often enough that the chances run that way. Thus, if you have a young dog that shows no vigorous interest, or no interest at all, you’ll surely be safer—and probably less sorry—if you exchange him for a more likely prospect. Far too many of our readers worry along with a hopeless pupil for too long. Which only makes the disappointment that much more bitter when it is finally realized. It is better to cast the die more quickly, when convinced.

On the other hand, if you have had experience, coupled with an insight into a dog’s very heart, so to speak,



you may be able to "see something" in him that you know just must come to the surface with more age and experience. Thus, as we have so often preached, it can be, and often has, that a slow dog to "come on" may prove top flight in the end.

The danger of dashed hopes will most often trace directly to an inexperience which permits hopes that are basically not sound. Any interpretation of a dog must be coldly calculated. We can so easily let sentiment sway an analysis! But experience can help us. It will lead us to inquire into (or already know) the dog's breeding and the family characteristics of his ancestors. Many a time I have stood either for—or against—a dog, based on his inheritance. I've known he's just got to have this or that—or lack it—as the case may be. So it devolves upon all of us to acquire experience. And those of us not that much interested must simply expect to pay for our lack of it thru failure ever to know the fullest fascinations of our dogs.

There is another interesting angle to all this: Often we may know things about a dog we know well—that the more casual observer can utterly miss. I remember a certain Setter bitch that I judged and placed a number of times in field trials. She was a magnificent bird dog. Some time later I recall judging her son. He did not win. Afterward his owner asked me what I thought of him.

"Not much," I told him frankly—"he can't hold a candle to his mother."

"He can hold it all over her," he said—and smiled—"but he just didn't

show it today." Later, over the supper table, we continued and interesting discussion. In the course of it he spoke of a Setter bitch of my own, saying:

"That's why I could never see what you saw in her," he said—then quickly added: "though I know you must have seen and known things about her that I didn't." This discussion was between friends—and in but the friendliest spirit—and I was as glad to get his angles as I think he was to get mine. Too, in a trial not long after that I noted where the young dog my friend fancied (and I hadn't) won a good stake—thus justifying his master's judgment of him—and I was glad.

You can see dogs run once in a field trial and pick your winners for that day. But such one test is not always conclusive—nor is it expected that it could be. Which is why consistent winning is what counts. Some years ago I started two of mine in a trial under judges who had never seen either of them before. The next day I was driving one of the judges out to the grounds and he said:

"That dog you ran yesterday was the best Setter I've seen in many a moon. With just one find he'd have won that stake in a walk."

"How 'bout the bitch?" I asked—and found she hadn't registered with him at all.

"I wouldn't give the last two inches of her tail for the whole dog," I told him and knew he found this statement hard to swallow. But a week or so later the bitch won an even more important trial under this same judge! And so it goes.







## OUTDOOR FUN WITH A FUTURE



# Reading Signs of the Wild

By Ted S. Pettit

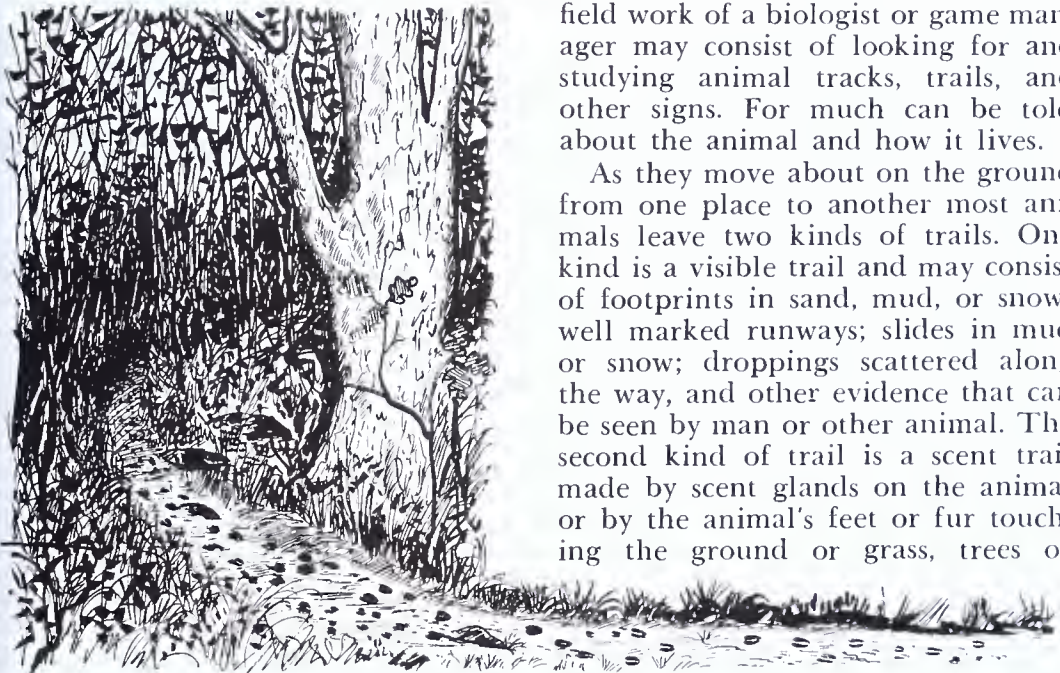
**T**IME was, in the history of mankind, that skill in reading signs of the wild was a necessity of life. Man depended upon wild animals for much of his food and clothing and to stay alive he had to be a skilled observer and tracker. In some parts of the world even today, life may depend upon this knowledge and ability.

But for most of us, being able to trail animals or to interpret correctly the signs they leave is not a necessity.

It can be important though in many outdoor hobbies, and even in some professions. The sportsman who can read and understand animal signs is more successful than one who lacks this skill. The sportsman who can trail an injured bear or deer and put the animal out of its misery is a better conservationist.

With many outdoorsmen, reading tracks and following animal trails is a hobby in itself, or even part of their work. A considerable part of the field work of a biologist or game manager may consist of looking for and studying animal tracks, trails, and other signs. For much can be told about the animal and how it lives.

As they move about on the ground from one place to another most animals leave two kinds of trails. One kind is a visible trail and may consist of footprints in sand, mud, or snow; well marked runways; slides in mud or snow; droppings scattered along the way, and other evidence that can be seen by man or other animal. The second kind of trail is a scent trail made by scent glands on the animal or by the animal's feet or fur touching the ground or grass, trees or



shrubs as it moves along. In this article only visible tracks, trails, and related signs will be discussed.

### Footprints

Footprints of wild animals are easy to find. Look along the beach, around mud puddles in country roads, along streams or lake shores, in snow along field or woodland edges, and other places where the earth is soft enough so that a foot may make an impression in it.

Without even knowing what kind of an animal made the track there is much you can find out about the animal and what it was doing. You can tell its approximate size. You can tell whether it was moving slowly or quickly. You can discover which way it was going, and sometimes by following tracks you can tell what the animal eats. You can discover too, whether the animal usually lives on the ground or whether it normally lives in trees or shrubs.

With practice, you can find out what kind of an animal made the track, for tracks are almost as distinctive to the experienced outdoorsman as fingerprints are to the F.B.I.

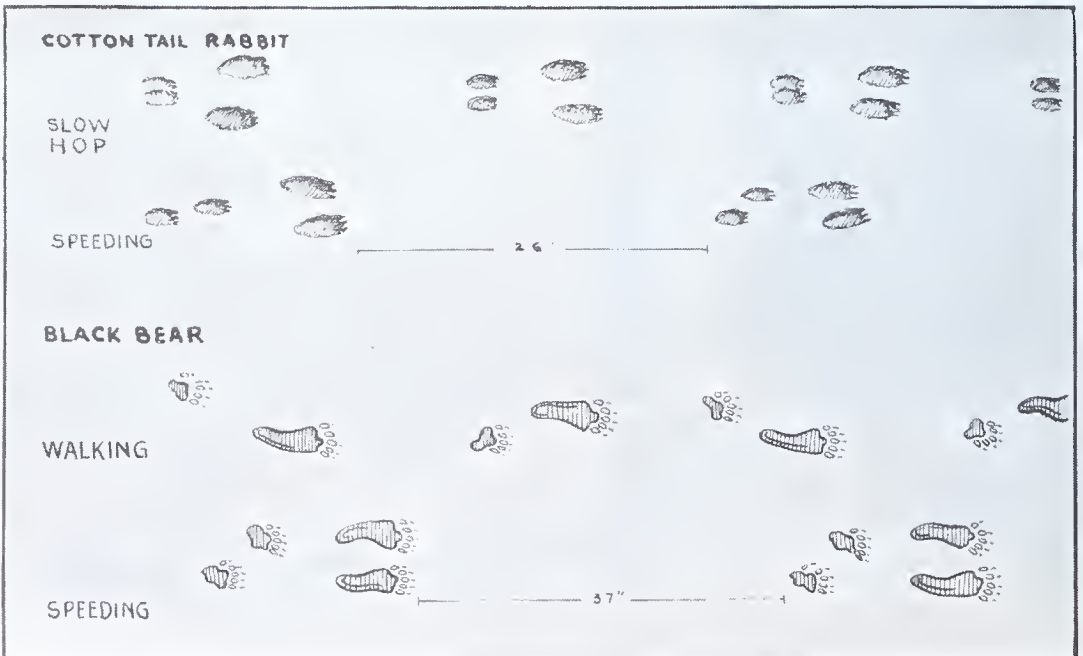
The first thing to learn in the case of mammals is how to tell the front

footprint from the rear, and with animals such as foxes this may be difficult since, in walking, their hind foot comes down in the print made by the front foot. But with rabbits, squirrels, raccoons, oposums, mice, and others that are more commonly found, the hind foot print is generally larger than the front.

The next thing to look for is how far apart the prints are, for this tells you two things—the size of the animal and whether it was walking, bounding or running, whether it was moving slowly or quickly for its size. The depth of the track and whether it is deeper in front than in back also tells you whether the animal was moving slowly or quickly.

Dogs, foxes, and coyotes may all live in the same area and their individual tracks are similar to the beginner. By size alone you cannot always tell one animal from the another. But the shape of the print and the other characteristics of a series of tracks help you identify the animal.

Careful study of the track too, will show whether the animal walks flat-footed or on its toes. Skunks, raccoons, beaver, and porcupines, bears, and man walk flat on their feet. Foxes and bobcats walk on their toes,







while deer, walk on their toenails.

Animals that usually live in trees hop or bound along when on the ground. In birds, this means that their tracks will be in pairs, rather than one in front of the other. Sparrows and woodpeckers, for example, hop and leave tracks that are side by side. Quail, grouse, herons or killdeer walk, and their prints are one in front of the other. Some birds such as robins and other thrushes both hop and walk and their tracks frequently prove it.

In mammals, those that live in trees such as squirrels, leave tracks in which their front feet are side by side, while in rabbit tracks, the front feet are usually one in front of the other. Deer mice tracks show paired front footprints, while in meadow mice prints, the front feet are on a diagonal.

### What a Trail Can Tell

By following a trail of individual footprints it is often possible to "read" some fascinating animal stories. You may see where a rabbit stopped to nibble clover or to browse on tree bark; you may see where he was frightened and bounded in a zigzag manner to a nearby woodchuck hole or bramble. Perhaps he didn't make it, and an owl or fox caught him midway. You may see where a fox walked along, stopping occasion-

ally to sniff at trees, rocks or shrubs. You see where he stopped to sniff the air, then ran swiftly off at an angle to stop at a mouse hole to dig out his dinner. You may see where a quail or grouse walked along in the snow feeding on weed seeds or buds and suddenly jumped and flew off when frightened by a dead leaf fluttering down or by some other sight or sound.

Sometimes it is possible to see where one animal tracked another or where two animals met in the woods. But experience in reading tracks is important. For once a track is made, it may remain for days and two tracks that cross may have been made hours or more apart. In addition, to knowing what animal made the track, we must also know how fresh the track is.

### Trails and Runways

Quite often we find runways or trails in the woods or fields where no tracks or footprints are evident. But the well-worn path made by animals as they walk back and forth to waterholes or favorite feeding areas are adequate signs to experienced outdoorsmen. Big game hunters frequently search out these trails and then conceal themselves nearby for an easy shot as the animal comes along. Trappers look for runways made by mink, beaver, muskrats and

other furbearers and set their traps in these trails. Nature photographers rig up camera traps in similar places to get pictures of wild animals at home. Raccoons, deer, porcupines, woodchucks, mice, and chipmunks frequently have well-defined trails they follow.

Beavers may have similar trails from their pond to nearby clumps of aspens. But many times they make another kind of trail—a water trail or canal along which they float the aspen saplings and branches which they store for winter food.

### Other Signs

There are other kinds of signs, too, that may be found in field or forest or along the edge of waterways. Some animals bed down for the night in an open field and in so doing mat down the grass in a way that forms an unmistakable sign of what they were doing. Deer beds are often found and rabbit too bed down in this way.

Sometimes in dusty roads or patches of bare soil along field or woodland edges you may find shallow depressions in the dust, with footprints of birds leading to and from the saucer shaped basin. Many birds take dust baths and leave a sign for us to find.

Other animals look for a mud hole to wallow in, as an escape from flies and other insects. Bears often leave such signs and the buffalo was famous for its wallows.

In areas where deer are common, one often sees the trees where bucks rub their antlers. As new antlers grow each year, they are covered with "velvet" that the deer rubs off when the antlers are full grown. Many times, in the process, he also rubs bark off young trees or at least leaves evidence on the tree of what he has done.

Animal tracking is fun. It can be exciting. As you become experienced you learn as much from tracks as by watching the animal itself.

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## EXPLODING DEER

An almost perfect example of how a deer population can "explode" under protected conditions is evident at Fort Campbell, an airborne troop military reservation straddling the Kentucky-Tennessee state line, the National Wildlife Federation reports.

Located within the huge Fort Campbell tract is a 1,000-acre maximum security Navy installation known locally as the "Bird Cage." Ringed by successive wire fences and guarded by Marine security patrols, wildlife in the inner area is well protected from poachers, free-roaming dogs and other predators.

In 1948, eight deer from Texas were stocked within the protected area. The deer population expanded and 78 animals were live-trapped and removed from the area. Earlier this year, an additional 162 animals were live-trapped and removed, with the remaining population estimated at 250 animals—about the maximum the habitat can support! In other words, a 61 to 1 ratio resulted in ten years from the original herd.



# Bagging Game In Plastic

By Don Shiner

**T**HE DAYS of blood stained hunting coats are gone forever! The ingenious device that removes the red stains, matted fur and feathers from the coat's game pocket is the small plastic bag. After field dressing rabbits and birds, the game is placed in this translucent container, and wrapped thusly, the meat is kept clean and sweet, and the hunting coat remains free of soiled marks.

Plastic bags are common household articles. Daily, housewives purchase groceries packaged in plastic bags. Fresh vegetables and fruit are packaged in this manner to prevent dehydration, loss of vitamins and for ease in handling. Fortunately for hunters, an amply supply of clean plastic carriers are readily available. Three or four bags take up less room in the coat than a pack of cigarettes. Then in the field, separate pieces of game can be stored in each bag, and later, at home, the containers can be discarded, or washed and dried for the next occasion. At the close of the season, the coat remains clean, free of blood stains. The need to scrub the rubberlined pocket with hot water, soap and detergent is eliminated.

The small plastic bag serves other useful purposes for the hunter. The thin, water proof material is an excellent lunch box; perfect for keeping matches moisture proof; ideal for storing duck, crow, turkey and other game calls, to prevent tobacco dust,



PLASTIC BAG keeps game clean and sweet, prevents blood from staining hunting coats. Game calls carried in such containers are kept free of tobacco dust and other debris normally found in coat pockets.

bits of leaves and other remnants which find their way into the coat pockets, from clogging the instruments and producing off-tune calls. The plastic vegetable bag is also suitable for carrying a change of socks. Experienced hunters know how tired feet are rejuvenated with a fresh pair of socks for the trip home. Then too, don't overlook the plastic bag for carrying dog biscuits and canine snacks afield. Actually the list of practical uses for this plastic container is almost endless.

However, the major contribution to hunting is game packaging. The elimination of all game stains from field coats and trousers will certainly keep these garments looking better if not more sanitary.

# An Idea for Sportsmen's Clubs

**E**ACH year, as we all know, we are losing many acres of open hunting ground and at the same time are gaining more hunters and fishermen.

Here is an idea I am positive will help by gaining Farmer Friends for the Sportsman and that is the only way to get more open land for hunting.

Almost every small town or community has a Sportsman's Club of some kind or other. The first thing for each club to do is to set up a Farmer Relations Committee of about six or more good men that are familiar with the farmers' problems. Their first job would be to contact the farmers in the vicinity of the club and find out what the farmers need most in the way of help on their farms, when it is needed most and then report back to the club at the regular meeting.

Then each member of the club should advise the Chairman of the Farmer Relations Committee what days he has off each week and if he is willing to donate one or more days of his free time to help a farmer in exchange for hunting rights on his farm. The chairman should keep a record of the men who will work and when they are available.

Later the chairman should contact each farmer and tell him how many men are willing to work and the days they are free to help him. Then when a farmer needs help he should simply call the chairman and tell him how many men are needed.

The same plan can be carried out in another way. Ask each member of the Club to contact a farmer friend or if he doesn't know a farmer personally, just tell him to drive up to any farm house and introduce himself to the owner, let the farmer know what is on his mind and offer to help him on some of his days off. He should be sure to leave his name and phone number.

If each member of each Sportsmen's Club in the United States would donate one or more day's of work each year to some farmer, I think there would automatically be a fifty percent increase in unposted land for hunting and fishing.

Another thing that would help is the fact that each club is sure to have specialists in their membership, such as plumbers, carpenters, electricians, masons, and so on. Surely each farmer would need some of them in a year's time.

Merle Payne  
North Springfield, Pa.

## PITTSBURGH SCIENTISTS TO STUDY ANTLERED DOE DEER

Pennsylvania deer hunters are again asked to help Pittsburgh scientists in procuring antlered doe deer. Female deer of this kind are so exceedingly rare—about 1 in 10,000 to 20,000—that the only opportunity for a scientist to see more than one such animal in a lifetime is by the cooperation of a vast number of hunters.

If any hunter should kill a doe with antlers, he is asked to phone, *collect*, Dr. J. Kenneth Doult at Carnegie Museum, Pittsburgh, Pa., MAYflower 1-7300. Dr. Doult asks to be permitted to examine the specimen before it is dressed out, if possible. However, if the hunter wishes to hog dress his deer immediately the entrails should be kept cold (preferably frozen) and protected from damage by dogs or wild animals until the scientist can examine them.



# Pennsylvania Official 1959 Open Seasons and Bag Limits

(Regulations apply for Hunting License Year, September 1, 1959 to August 31, 1960)

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 31 will be 8:00 A. M., EST. On other opening days, and otherwise during the season for upland and big game, the shooting hours daily are from 7:00 A. M. to 5:00 P. M., EST, excepting from July 1 to September 30, inclusive, 6:00 A. M. to 7:30 P. M., EST, and the hours for the October archers' deer season, which are 6:00 A. M. to 5:30 P. M., EST. (FEDERAL REGULATIONS FOR SEASONS, BAG LIMITS AND GENERAL SHOOTING HOURS ON MIGRATORY GAME BIRDS WILL BE ANNOUNCED LATER.)

UPLAND GAME (Small game possession limits below)		BAG LIMITS		OPEN SEASONS	
		Day	Season	First Day	Last Day
Ruffed Grouse	.....	2	8	Oct. 31	Nov. 28
Wild Turkeys (see below certain counties closed)*	.....	1	1	Oct. 31	Nov. 21
Squirrels, Gray, Black & Fox (combined)	.....	6	30	Oct. 31	Nov. 28
Ring-necked Pheasants, males only	.....	2	8	Oct. 31	Nov. 28
Rabbits, Cottontail	.....	4	20	Oct. 31	Nov. 28 AND
Rabbits, Cottontail ..(not more than 20 in combined seasons)	.....			Dec. 26	Jan. 2, 1960
Bobwhite Quail	.....	4	12	Oct. 31	Nov. 28
Hares (Snowshoe Rabbits)	.....	2	6	Dec. 26	Jan. 2, 1960
Raccoons (hunting or trapping)	.....	Unlimited		No Close Season	
Woodchucks (Groundhogs)	.....	Unlimited		No Close Season	
Grackles	.....	Unlimited		No Close Season	
Squirrels, Red (closed October 1 to 30, inclusive)	.....	Unlimited		All mos. (exc. Oct. 1-30)	
Bears, over one year old, by individual	.....	1	1	Nov. 23	Nov. 28
Bears, as above, by hunting party of three or more	.....	2	2	Nov. 23	Nov. 28
<b>DEER:</b> { <div>             Bow and Arrow Season—Any sex, regardless of size. (Requires Hunting License and Archery License, but no Antlerless Deer License)           </div> <div> <b>ANTLERED DEER</b>—Regular Season—Male with two or more points to one antler: Provided, a male deer with an antler three or more inches long without points, measuring from the top of the skull as the deer is in life, shall be considered legal, by individual           </div> <div> <b>ANTLERLESS DEER SEASON</b>—(Requires Hunting License and Antlerless Deer License), by individual           </div>		(only one deer for combined seasons)		Oct. 3	Oct. 30
		1		Nov. 30	Dec. 12
		1		Dec. 14, 15 and 16	
		1			

**SPECIAL REGULATIONS**

**TURKEYS**—COUNTIES CLOSED—\*Adams, Cumberland, Perry, York and that part of Franklin south and east of U. S. Route 11.

**POSSESSION AND TRANSPORTATION LIMITS** of legally-killed small game shall mean not more than the daily limit for the first day nor more than an accumulated total for each succeeding day of the open season for each species; but not in excess of the season limit, regardless of where held, stored or found in possession.

**DEER**—Even though there are three separate seasons for taking deer, a hunter may not kill more than one deer during the three 1959 seasons, whether hunting individually or with a camp or hunting party. An Archery License is required during Bow and Arrow Season, issued only by County Treasurers at a fee of \$2.15, and the Department of Revenue, Harrisburg, at a fee of \$2.00. Antlerless Deer Licenses are issued only by County Treasurers at a fee of \$1.15, and valid only in the county for which issued. Farm occupants may hunt for deer during the Archery Season, as well as the Antlerless Deer Season, without a license on lands resided upon, or those immediately adjacent with the written consent of the owner or lessee. Under the law, no application for an Antlerless Deer License shall be approved, or license issued, to a nonresident prior to November 14, or after December 13, 1959.

**BEAVERS**—No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to the Game Protector in District or County where trapped.

**TRAPPING**—Traps for furbearers not to be placed, staked or set before 7:00 A.M. on the first day of open seasons. The season indicated for Trapping closes at 12:00 o'clock Noon on last day. Traps must be tagged with metal name tags.

**SNARES**—The use of snares is prohibited in all counties except by special permit.

## 1959 PENNSYLVANIA OPEN SEASONS FOR WATERFOWL AND OTHER MIGRATORY GAME BIRDS UNDER FEDERAL AND STATE REGULATIONS

**LEGAL SHOOTING DAYS AND HOURS—SUNDAYS EXCEPTED**  
*Unlawful to hunt for any wild bird or animal, including migratory game, on October 31, 1959 prior to 8:00 A.M., EST., or on October 24, prior to 12 o'clock Noon EST. (Except deer with bow and arrow).*

Sora; Rails; Gallinules	Sept. 1 Oct. 15	Nov. 9 Nov. 23	15 4	30 8	Sept. 1 to Nov. 9 Oct. 15 to Nov. 23	$\frac{1}{2}$ hr. before sunrise to sunset $\frac{1}{2}$ hr. before sunrise to sunset
Woodcock						
Wilson's or Jacksnipe	Oct. 24 Sept. 1	Nov. 21 Nov. 4	8 10	8 20	Oct. 24 to Nov. 21 Sept. 1 to Nov. 4	sunrise to sunset (except Oct. 24) 12:00 o'clock Noon to sunset
Doves						

NO FEDERAL STAMP REQUIRED TO HUNT SORA, RAILS, GALLINULES, WOODCOCK, JACKSNIPES AND DOVES; STAMP REQUIRED TO HUNT DUCKS, GEESE, COOTS, AND BRANT.

Ducks	Oct. 24	Dec. 12	3	6	Oct. 26 to Dec. 12	sunrise to sunset
(Daily bag limit may include 1 wood duck; possession limit 1.)					Oct. 24 only	12:00 o'clock Noon to sunset
(Daily bag and possession limits may include 1 hooded merganser.)					Oct. 31 only	8:00 A.M., EST. to sunset
(Daily bag limit and possession limit may not include more than 1 canvasback, or 1 redhead, or 1 ruddy duck.)					NOTE: In the Counties of Bucks, Philadelphia and Delaware and on the Delaware River bordering such counties, the waterfowl season shall be:	
Mergansers (American and Red-breasted)	Oct. 24	Dec. 12	5	10 (not	First Day	Daily Possession Limit
to be counted in daily bag and possession limits on other ducks)					Last Day	Bag Limit
Geese (except Snow)					Geese (except Snow)	Dec. 22
					Brant	Dec. 22
					Ducks*	Dec. 23
	Oct. 24	Dec. 12	2	4	Coots	Dec. 23
	Oct. 24	Dec. 12	3	6	Jacksnipe	Dec. 12
	Oct. 24	Dec. 12	6	6	(*See opposite column for restricted daily and possession limits.)	

## MIGRATORY BIRD HUNTING METHODS

**Permitted:** Bow and arrow, or shotgun not larger than 10-gauge, fired from shoulder (including hand-operated and semi-automatic repeating shotgun of not more than 3-shell capacity, which must be plugged to 3 shots so that plug cannot be removed without disassembling the gun); dog; blind; boat propelled by hand; floating device other than sinkbox; artificial waterfowl decoys. Injured or dead waterfowl may be picked up by means of a motorboat, sailboat or other craft. Shooting is permitted from a boat or other craft having a motor attached if such craft is fastened within or under immediately alongside of any type of stationary hunting blind.

**Prohibited:** Use of electrical devices or recordings in taking migratory game birds; use of any type of stationary hunting blind, decoy, stand, or other contrivance; use of any type of aircraft, motorboat, automobile, motor vehicle, or any other vehicle; use of any type of motorized boat, power boat, sailboat, or any device towed by power boat or sailboat. Waterfowl, coot, gallinules and doves may not be taken under any circumstances by the aid of salt, or shelled or shucked corn, wheat, or other grains, or other feed or means of feeding similarly used to lure, attract, or entice such birds to, on, or over the area where hunters are attempting to take them. As used herein the terms "salt" or shelled or

means of feeding similarly used," shall not be construed as including salt blocks, properly shocked grain, standing crops (including aquatics), flooded standing crops, flooded harvested crop lands, or, in connection with the hunting of waterfowl, coots and gallinules, grains found scattered solely as a result of normal agricultural practices or, in connection with the hunting of doves, grains found scattered solely as a result of normal agricultural harvesting. Waterfowl may not be hunted by means, and/or use of cattle, horses or mules and no motor-driven land, water or air conveyance or sailboat may be used to concentrate, drive, rally or stir up waterfowl or coots.

# FEDERAL STAMP FOR MIGRATORY BIRD HUNTING

It is unlawful for a person over the age of 16 years to take migratory waterfowl unless he carries on his person an unexpired Federal Migratory Bird-hunting Stamp, validated by his signature written in ink across its face. Not valid after June 30 following date of issue. This stamp is not required to hunt Sora, Kails, Gallinules, Woodcock, Wilson's or Jacksnipe and Doves.





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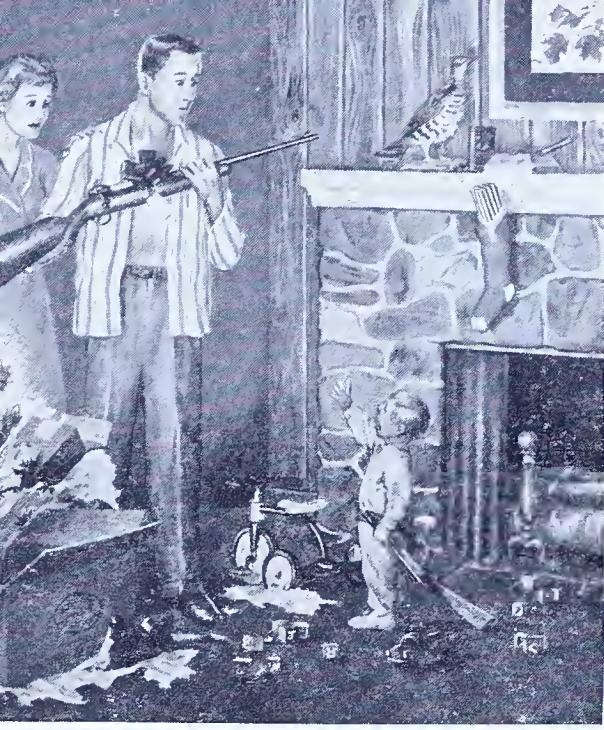
# PENNSYLVANIA GAME NEWS

DECEMBER, 1959

TEN CENTS







# THE STORY BEHIND THE COVER

**Y**OU never know about kids! The perfect gift, from an adult point of view, may not suit a toddler's fancy at all. But certainly, this month's cover depicts a fine Christmas for both sportsman and son. Toy gun or sporter—each is a means of great pleasure and healthy outdoor sport in the years ahead.

For many people, of course, guns and Christmas don't seem to go well together. Guns are associated with killing. But what many of these people do not take time to consider is that many other implements are equally dangerous if placed in untrained hands. A new car driven by a careless teenager (or adult) can be nothing more than 90 miles per hour of destruction and mayhem. A chemistry set can cause fire and poison and explosion if not used safely and sanely. Even a toy bike can result in tragedy if it is pedaled the wrong way. No, it is not the implement nor the gun that causes accidents and sorrow; it is the person, young or old, behind the wheel, the controls or the trigger who determines the destiny of the manufacturer's product.

Actually, shooting is the world's oldest and safest sport. In the thirty-six-year-old Junior program conducted by the National Rifle Association, involving over two-and-a-half million youngsters, there have been only two recorded accidents. There has never been a fatal accident on a N.R.A. sponsored and conducted rifle range.

Obviously, the boy on this month's cover will have to wait a few years before he gets a rifle exactly like dad's. Meanwhile, let's hope he doesn't learn his lessons in gun handling from the fast-draw artists and sawed-off shotgun characters of today's western TV programs. But sooner or later, every American boy wants a real gun that shoots real bullets.

In giving a rifle to any boy, his parents assume an obligation to him and a responsibility to their community which go far beyond a few "do's" and "don'ts." For we must admit that a rifle can be dangerous if placed in the hands of an eager, untrained and careless boy. On the other hand, if parents will assume the moral obligation of seeing to it at the very beginning that the boy is properly taught the rules of safe gun handling, their gift will bring to him untold hours of wholesome recreation in the field or on the range.



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Commonwealth of Pennsylvania

DAVID L. LAWRENCE, *Governor*

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By Ned Smith

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# Pennsylvania's State Animal

**M**ONARCH of all Penn's Woods . . . most important big game animal on the North American continent . . . dream trophy for most hunters . . . elusive, swift, wary and wild—that's the whitetail deer, Pennsylvania's new state animal.

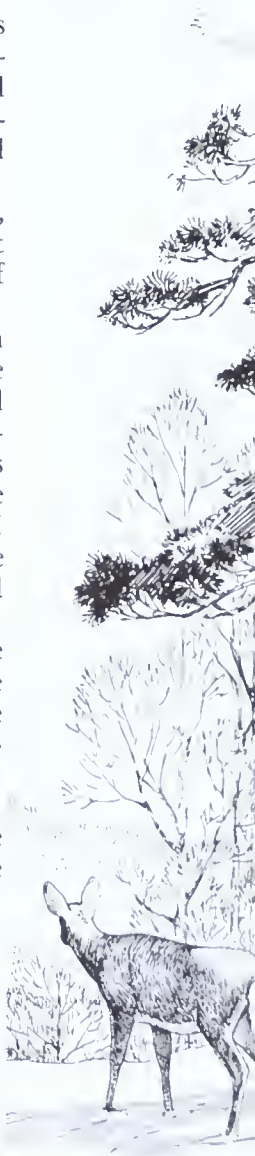
None who truly know him would question this selection by the 1959 General Assembly of the Commonwealth of Pennsylvania. Introduced by Messrs. Bonner, Breth, Goodrich and Davis on March 31, House Bill 997 was passed by the House of Representatives and the Senate, became Act No. 416 and was signed into law by the Governor on October 2. Thus *Odocoileus virginianus virginianus*, the white-tailed deer, became the official State animal of Pennsylvania.

No other animal, with the possible exception of the beaver, so predominantly figures in American history. This nation built its first sinew and bone on venison, made its first clothes out of buckskin.

While other and even larger creatures fell before the march of civilization, the whitetail deer survived and multiplied. Gone are the panther, bison, elk and timber wolf. But strong and abundant are the deer. Through proper management and protection, the Pennsylvania deer herd has remained a tremendous esthetic and economic asset to our Commonwealth. There are more deer today than the pioneers ever dreamed possible and they are found in more places than most modern men imagine—in city parks, on suburban golf courses, on valley farms and most of all in second growth forests.

This month more than half a million hunters will seek the wary whitetail, their hopes and dreams based on an elusive target. As the State legislature so accurately described him, the deer is "a proud and noble animal, possessing intelligence, endurance and character."

No better choice could have been made, no better a symbol designated for the Keystone State. In joining the ruffed grouse (State bird), the hemlock (State tree) and mountain laurel (State flower), the white-tailed deer has received a well earned and richly deserved honor.



# The Gift of the Outdoors

By Steve Szalewicz

**W**E have come to know the Jolly Old Fellow who enters by chimney as all "ho-ho-hos" and glad hands. He doesn't disappoint the "good." And outdoor people are special because they live in clean air by sparkling waters. Christmas gifts of fishing poles and guns, boats and hunting bows will only make them better.

By now, we have bought those rods and guns, boats and bows for gift-giving. At shop lunchtime or sportsmen's gathering in the next few weeks some fathers will confide:

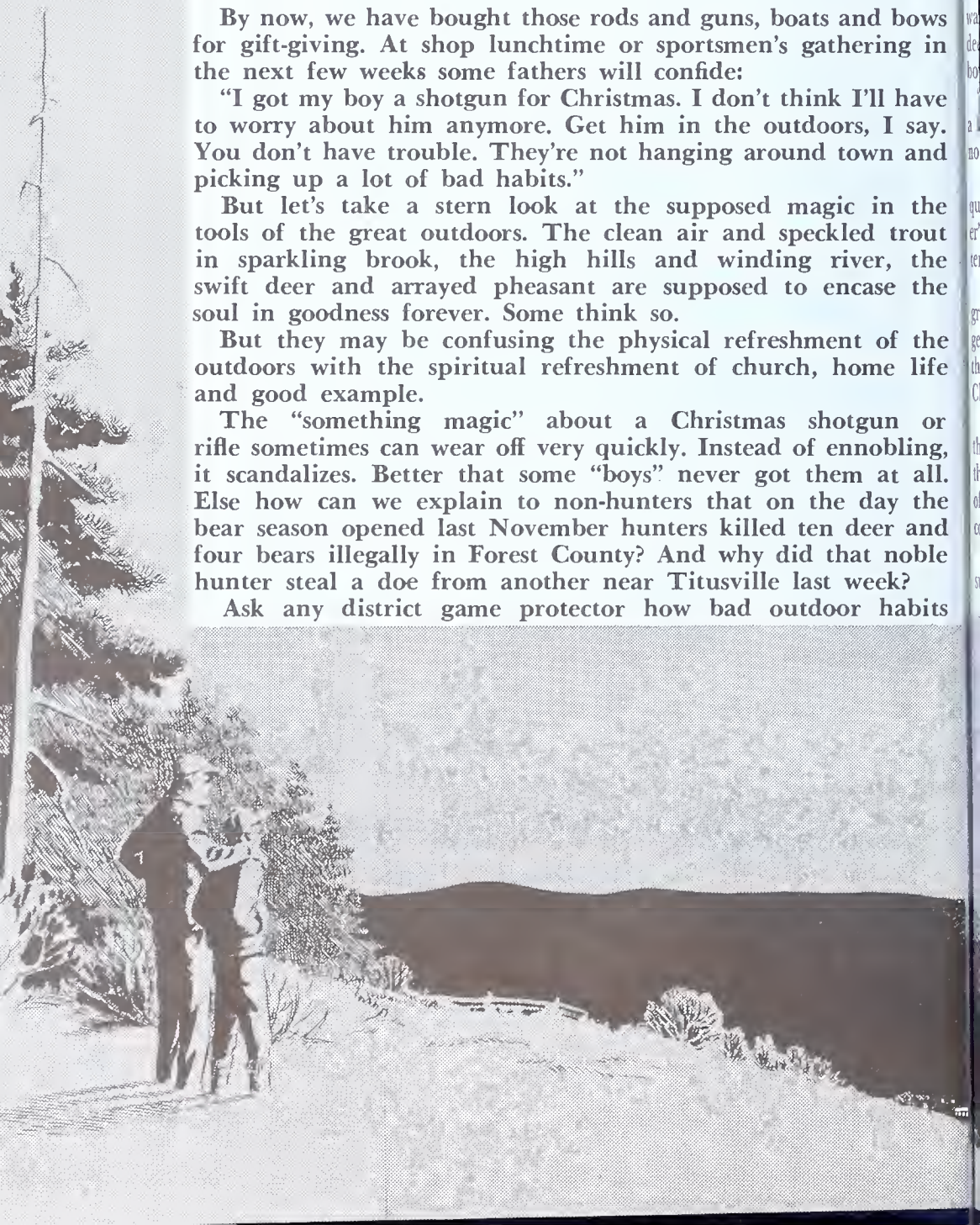
"I got my boy a shotgun for Christmas. I don't think I'll have to worry about him anymore. Get him in the outdoors, I say. You don't have trouble. They're not hanging around town and picking up a lot of bad habits."

But let's take a stern look at the supposed magic in the tools of the great outdoors. The clean air and speckled trout in sparkling brook, the high hills and winding river, the swift deer and arrayed pheasant are supposed to encase the soul in goodness forever. Some think so.

But they may be confusing the physical refreshment of the outdoors with the spiritual refreshment of church, home life and good example.

The "something magic" about a Christmas shotgun or rifle sometimes can wear off very quickly. Instead of ennobling, it scandalizes. Better that some "boys" never got them at all. Else how can we explain to non-hunters that on the day the bear season opened last November hunters killed ten deer and four bears illegally in Forest County? And why did that noble hunter steal a doe from another near Titusville last week?

Ask any district game protector how bad outdoor habits





are acquired. The squirrels were plentiful in Rockland Township last November. Two fathers and two sons killed 25 before the warden arrived. The fathers admitted they had killed not only their allowance of six apiece but shot a few for the boys. The game laws were scorned in all paragraphs. And good example?

Many 12-year-olds made their first trip to deer camps a few days ago. Was there a supply of "camp meat" from an illegally killed deer? Did the roster hush up a "mistake" deer in the presence of the boys?

Was an illegal deer concealed past a check-point with rehearsed plans and memorized lies? Like last year when a party was caught at Pleasantville and the blame for an unlawful deer in the trunk was put on the thin shoulders of a very young boy.

"Go easy on the boy, warden. It's his first year. He did it," a Franklin father performed for the warden's sympathy. "You're not going to pinch this little kid, are you warden?"

After watching a father break the accepted codes and required laws of the outdoors, a boy quickly can question a farmer's rights and pick up the other bad habits of vandalism, litterbugging and pollution.

But let's not give up on the something soul-inspiring in the great outdoors. There is no doubt that if we city people could get away from the glow of our city lights, from the glitter of the house trees, from the tinny blare of everplayed carols at Christmas time, we could feel "heaven and nature sing."

Alone in the darkness of a star-lit outdoors we could imagine that the whisper in the trees was a flutter of angel wings, that the thud of snow from a bending hemlock was the tired plod of Mary and Joseph. And the creak of tree against tree trunk could be the door closing at the crowded inn.

Some ennobling tingle might sparkle in the veins of all at such a time as this. Christmas gifts or no.





# WALKIN' SHOES

By NED SMITH

## The Best Darned Deer

1. In Pennsylvania what animal is the deer's worst enemy?
2. How long does it take for a white-tail buck to grow a large set of antlers?
3. What is the color of a deer's summer coat?
4. Do all year-and-a-half old bucks produce spikes?
5. The bulk of a deer's diet consists of grasses. True or false?
6. What is meant by the "rutting season?"
7. Of what use is the whitetail's long tail?
8. Fights between rival bucks often result in death for one or both of the combatants. True or false?

**W**HITETAIL—the most thrilling word in the outdoorsman's vocabulary! Brainy and handsome, a challenge to the hunter in us, our native deer is easily the most popular big game animal in the U.S.A. in general and Pennsylvania in particular. In fact, its popularity became a matter of legislative record when on October 2, 1959 Governor Lawrence signed into law a bill adopting the whitetail deer as the Commonwealth's official State animal.

Aside from the rare elk, the whitetail is the only member of the deer tribe found in Pennsylvania. There's little resemblance between the two, although some fools seem determined to wipe out our meager elk population by shooting the protected animals during the open deer season. An elk is a huge animal. Mature

cows weigh 350-400 pounds; bulls seldom weigh less than 400 pounds, and have reached 800 pounds. It takes an exceptional whitetail to exceed 200 pounds on the hoof. The elk's head and neck are dark brown, the latter adorned with a shaggy mane in contrast to the sleek neck of the deer. Seen from the rear, the elk wears a big, light colored rump patch and an insignificant stub of a tail. The whitetail's rump is brown, but the area directly beneath the tail is pure white. The tail itself is large and hairy, brown above and white on the underside. The antlers are as dissimilar as the other physical features. The elk's backward sweeping rack frequently reaches a length of sixty inches, more than twice the length of a trophy whitetail's forward curving antlers, measured on the curve.

Wherever deer are discussed three arguments sooner or later crop up. One concerns the speed of a running deer, another the height of a deer as it stands in life, while the other—frequently instigated by a magazine cover or calendar painting—concerns the color of the critters.

Speed is deceptive. The man behind the gun will swear the ten-pointer he missed was hitting eighty. The truth of the matter is that a deer's speed seldom exceeds thirty-five or forty miles per hour. His usual high-bounding exit is probably nearer twenty or twenty-five m.p.h. It is in jumping that the whitetail excels. He can soar over windfalls and boulders as though on invisible wings.



BULL ELK  
IN  
AUTUMN



WHITETAIL BUCK  
IN  
AUTUMN



DOE AND FAWN  
IN  
SUMMER

"BUTTON BUCK"  
IN  
WINTER

NEZ  
SMITH



MAY



JUNE



JULY

Clearing an eight foot fence or broad jumping twenty feet is no more difficult for him than stepping over a crack in the sidewalk would be for a schoolboy.

As to height, only a *big* buck will stand three feet high at the shoulder. The average Pennsylvania doe is probably nearer thirty inches tall.

Color is variable. A whitetail can be almost any shade of brown or gray. What starts most arguments is the fact that there are two distinct seasonal pelages. In the spring the adult deer acquires a coat of rather fine reddish-brown hair. The face is often marked with an obscure blackish "Y". In autumn this pelage is replaced by a salt-and-pepper coat of gray or grayish brown color. The hairs are coarse and hollow, providing such excellent insulation that the animal can lie in the snow for hours on a cold day and cause no noticeable melting.



DEER BED

Fawns, of course, wear the well-known rusty coat with white spots until early fall, when it is replaced with the adult gray winter coat.

One thing most deer hunters fervently wish for is a buck with trophy class antlers. While the whitetail's rack can not compare in size with those of its larger cousin, the mule deer, a symmetrical set of antlers with an eighteen or twenty inch spread is a supremely handsome prize. When we look at a trophy rack it's hard to believe that those massive, bony antlers were formed within the span of about five months. It's true though. In mid-spring the new growths begin as mere knobs of blood-filled living tissue covered with a fuzzy coating called *velvet*. By mid-summer they have acquired their points, if they are to have any, and by early August have attained full size. Within another month they have hardened and the velvet covering has been shed. We can read many things in a set of antlers. Bent, twisted tines or beams are the result of an accident while the antlers were soft and growing. Burrow-like holes tell us a botfly larvae, similar to the "warbles" we find on rabbits, once lived in the soft tissue. Broken antlers speak of fierce clashes with rival bucks. Spike horns mean a dietary deficiency; large racks generally mean good food. Great racks aren't necessarily proof of advanced age. With the best of food a year-and-a-half old buck can produce





AUGUST



OCTOBER



JANUARY

a beautiful rack. As a matter of fact the nicest trophies are carried by animals from three to six years old. Beyond that age the average buck produces poorer and poorer racks each succeeding year.

Rubbing the antlers on trees to remove the last traces of velvet is only a prelude to the vigorous treatment they will soon receive as the rutting, or mating, season approaches. At this time the bucks become extremely belligerent, and trees and bushes are horned with the same ferocity as would be a challenging male.

Should a rutting buck meet up with a rival buck at this time something's gotta give. Coughing and wheezing a few insults they sidle up to one another, hair standing on end and looking as mean as old Satan himself. They circle slowly, watching tensely for an opening or a false move, then in a flash they wheel and slam their antlered heads together with a resounding crash. From there on the fight becomes a pushing match, sometimes interspersed with more breaks and antler-busting charges. The fight is over when one buck feels himself weakening and beats an ignominious retreat. Seldom is he pursued and rarely does the fight end in injury. Occasionally, however, one of the gladiators is gored or antlers are so inextricably locked that the combatants die of exhaustion or starvation.

Whitetails are anything but monogamous. Any and all does are candi-

dates for a buck's amorous advances, and the latter is not adverse to rushing pell-mell over hill and dale looking for more fields to conquer. Fortunately this lovesickness has largely abated by the opening of the December deer season, permitting the cervine Romeos to concentrate on the more mundane matter of keeping their hides intact.

Some time in the winter the bucks shed their now useless antlers. What was a haughty twelve-pointer in the morning might be, without warning, as hornless as a doe by noon. Strangely enough, those selfsame growths that could not previously be detached from their bony pedestals by the strongest man might unceremoniously drop from the deer's head of their own weight when the time is ripe.

Winter is the critical season for whitetails. Wherever the deer population exceeds the carrying capacity of the range, malnutrition rears its ugly head. Fawns of the past spring generally fall victim first, for the simple reason that the little browse available to the larger deer is beyond their reach. Malnutrition paves the way for pneumonia, too, and makes deer easy prey for harassing dogs.

Springtime brings with it new hope and new life for the deer herd. In late May or June the fawns are born—one or two to each pregnant doe. Weighing an average of four or five pounds at birth a tiny fawn—with its spotted coat, long pencil-thin legs,

and innocent baby face—is an appealing creature. Too appealing, I might add, to well-meaning but uninformed persons who carry them from the woods, thinking they are lost. The truth is, their mothers are nearly always in the neighborhood but, of course, will seldom put in an appearance in the presence of humans. In most cases the “rescued” fawn is only a few days old—too wobbly to escape and too trusting to try. A week later, though, it could make a fool of the fleetest of humans.

A fawn's chief defense is in hiding. Concealed in a grassy place or on the forest floor where its spotted coat makes it nearly invisible it will flatten its gangly form against the ground at the first hint of danger. The older fawns seem to know when they've been discovered and will take off in high gear when “the jig's up.” Captured, they bleat loudly and repeatedly and in their anxiety the does often rush quite near. Ordinarily, though, Mamma will remain just out of sight, sometimes stamping and snorting, but making no attempt to defend her offspring. Instances in which does have fought off dogs or foxes are rare and exceptional examples.

As the fawns grow older they accompany their mothers more and more, becoming familiar with their

home range, nibbling their first solid food, learning what will harm them and what will not. At times they romp and kick like frolicsome calves, but like other wild children they are disciplined, too, when the occasion calls for it. A sound whack from their mother's forefoot is the deer's equivalent of the woodshed treatment.

By the end of September they have exchanged their spotted coats for the gray-brown pelage of adulthood. The buck fawns now sport one or two inch antlers, or “buttons.” Although the males will not become sexually mature until the next autumn, many of the female fawns will be bred during their first autumn and bear fawns of their own at the age of one year.

Of all the facets of the whitetail's life, its food habits are probably the most misunderstood. We see a herd of deer grazing in a field and immediately classify them as grazing animals. Actually they are primarily browsing animals, but have learned to seek food in agricultural areas because of a shortage of natural and preferred foods in the forests. It is true that during the spring and summer whitetails graze to some extent on various weeds and grasses in forest clearings and edges, and during the autumn season they avidly consume large quantities of acorns and other mast, but during most of the year they try to subsist on the tender tips of trees and shrubs when available. High on the preferred list are the various maples, the sumacs, hemlocks, white cedar, sassafras, witch hazel, and others. Chestnut oak, wild cherry, aspen, chestnut, sweet fern, and dozens of other plants are heavily utilized, although it's sometimes difficult to say which are preferred and which are eaten for want of something better. Such plants as mountain laurel and rhododendron are starvation foods.

The whitetail's daily routine varies somewhat with the season and the





location, but as a rule most of the feeding is done at night. Around day-break there is a general movement from the feeding grounds to the bedding areas. Once there, the animals usually lie about, chewing their cuds and taking life easy most of the day. A little feeding and perhaps drinking is indulged in around noon, and in remote areas where the deer are rarely disturbed this mid-day activity is quite extended. Shortly after sunset the animals again stir themselves, and begin their evening feeding spree. Under the cover of darkness they become bolder, and it is then that they are more likely to raid a buckwheat field or apple orchard.

Hunters are familiar with the whitetail's sound of alarm—that shrill nasal snort or whistle. Other means of communication are not so well known. The bleat of a frightened fawn and the threats and challenges of rutting bucks have already been mentioned. I've heard does "talking" to their fawns in little moaning sounds that were scarcely audible twenty feet away. Word of danger is also conveyed by stamping the forefeet against the ground. Scent, too, is used in communication. Watch the tarsal glands on the inside of a deer's hocks. When the animal's suspicions are aroused, the hairs over the glands stand on end. Each step rubs these tufts together, spraying the air with the strong-smelling secretion like two brushes stroked one against another. Downwind the scent is soon picked up by every other deer. (This secretion is the reason these glands should not be handled while skinning the deer. It's strong taste is easily transferred to the meat). The tail itself is a danger signal, waving like a huge white flag that can be seen at an astounding distance.

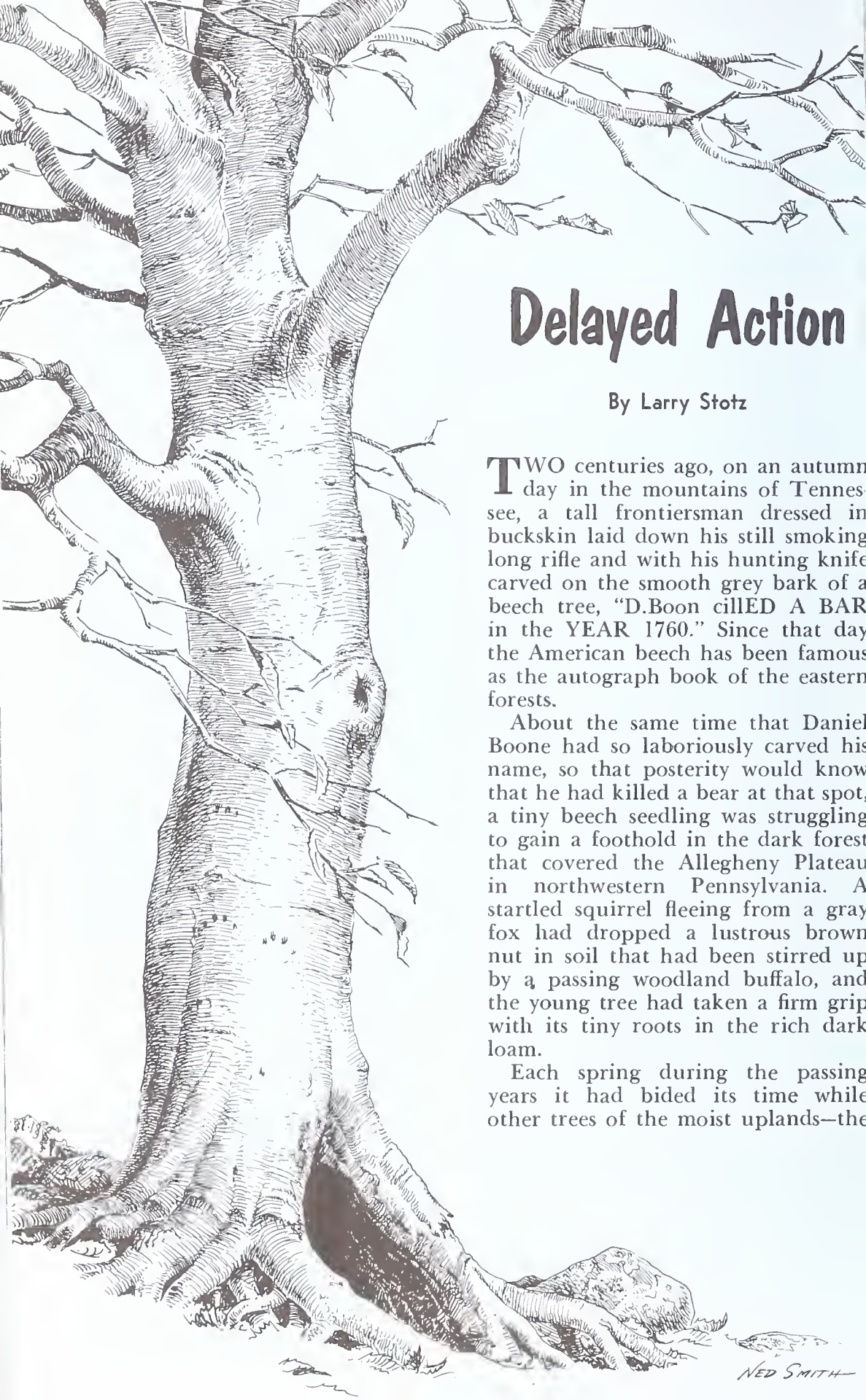
It's difficult to imagine that anything but man and his high-powered rifle could kill an animal so intelligent, alert, and fleet of foot as a whitetail deer, but the creatures have

other enemies to reckon with. One of the most insidious is starvation. Of late years two others have been steadily gaining prominence. One is the automobile and the other the free-running dog. Slower, more attentive driving in deer country would undoubtedly lessen the highway slaughter. The dog problem is a tougher nut to crack. The average person has no conception of the number of deer that are killed by packs of dogs running wild in our Pennsylvania mountains. These renegades not only kill deer to fill their bellies, they also pull down deer for the fun of it. Game Protectors can tell you of their victims they've found—pitiful creatures with the look of terror in their eyes, wanting to run but unable to move because the canine fiends had hamstrung them and torn away half their hindquarters.

Fortunately the whitetail is endowed with the necessary vigor, craft, and reproductive capacity to thrive in spite of hunting pressure, dogs, cars, jacklighters, and disease. With a little help from man in the form of sound management and an understanding public there's no reason why Pennsylvania shouldn't always be a major hangout for the smartest, prettiest, and best deer of them all.

## ANSWERS TO THE QUESTIONS

1. The stray dog.
2. About five months, regardless of size.
3. Reddish brown.
4. No. Under excellent food conditions such bucks will often produce racks with eight or more points.
5. False. Deer much prefer the tender tips of twigs, acorns, etc.
6. The mating season.
7. It is used as a danger signal.
8. False. Most fights result in nothing more serious than loss of face.



# Delayed Action

By Larry Stotz

**T**WO centuries ago, on an autumn day in the mountains of Tennessee, a tall frontiersman dressed in buckskin laid down his still smoking long rifle and with his hunting knife carved on the smooth grey bark of a beech tree, "D. Boone killed A BEAR in the YEAR 1760." Since that day the American beech has been famous as the autograph book of the eastern forests.

About the same time that Daniel Boone had so laboriously carved his name, so that posterity would know that he had killed a bear at that spot, a tiny beech seedling was struggling to gain a foothold in the dark forest that covered the Allegheny Plateau in northwestern Pennsylvania. A startled squirrel fleeing from a gray fox had dropped a lustrous brown nut in soil that had been stirred up by a passing woodland buffalo, and the young tree had taken a firm grip with its tiny roots in the rich dark loam.

Each spring during the passing years it had bided its time while other trees of the moist uplands—the



black cherry and the red maple—had brazenly flaunted their bright new leaves in defiance of the lurking frosts. Among them the beech with its naked crown had looked almost lifeless, for its sharp pointed brown buds had always been the last to unfurl the young leaves that they had sheltered through the long winter.

In summer its graceful crown had broken the force of pelting rains from sudden showers and had allowed the rain drops to trickle gently down through a labyrinth of leaves, twigs and limbs to the thirsty soil beneath. The ghostly grey bark of its columnar trunk had been lighted up from the incandescent glare of lightning strokes that had shattered a towering black cherry and a dark, brooding hemlock that had disputed the ground on which the old beech stood. Their broken boles had long since crumbled into dust to nurture the roots of the tree that the lightning had spared. The mounds of earth near the old beech marked the graves of less windfirm trees that had toppled before the onslaught of savage gales.

In autumn its leaves had glowed like burnished copper under bright October skies. While the scarlet and the yellow leaves of maple and cherry had fluttered to the ground like stricken Birds of Paradise the leaves of the old beech had still clung stubbornly to the zig-zag twigs.

Around its base the brittle cast-off leaves of other autumns had accumulated, and the tree had felt the searing heat of forest fires—repeated fires that had eaten into it like a cancer. In the charred cavity at the base of the trunk generations of black bears had hibernated and had born their tiny cubs. They had climbed awkwardly up the old tree in search of beech nuts and had left their tell-tale claw marks in the bark. Over the centuries the trunk had formed a broad highway for hungry bears and chattering squirrels, and a pic-



ture book that had recorded their travels.

In winter when the winds from the north had howled between its empty limbs, and swirled the dry snow about its trunk, hungry deer had deserted the shelter of the dark needled hemlocks and had pawed through the snow with shiny black toes in search of beech nuts. One winter day, when the tree was young, an Indian hunter with taut bow string and full quiver of arrows had stalked a deer that had once lain as a spotted fawn beneath this very tree. Now, it lay kicking in the virgin snow with a flint tipped hunting arrow through its heart. With the sap no longer coursing through its trunk, the great beech had been impervious to the drought and icy blasts of the northern winters. The grey bark that had born the claw marks of the hungry bear had effectively sealed off the biting cold. In late winter its crown had been weighted down and battered by glaze storms that had coated each limb and tiny twig with shiny blankets of ice that had crackled in the wind.

Then the logger and the bark peeler had come to the forest. At first they had passed through lightly cutting only the big hemlocks, and peeling their thick bark for the tanning of leather. The long, tapering

trunks had been left to rot on the ground. The hardwoods they had spared. Years later the loggers had returned but had felled only the choicest hardwoods, pine and hemlock. The beech with the hollow butt and the battered, ragged crown had been spared while around it prime trees had crashed to the ground and had left the old beech towering like a sentinel over the silent stumps.

During the first quarter of the twentieth century a county road had been built near the old beech. A boy and a girl had strolled off the road arm in arm and had carved their initials side by side on the tree's smooth bark beneath the claw marks of the black bear. They had often picnicked in its cool shade and had picked spring wild flowers which they had tossed aside when they had withered in their hands.

In the fall of 1914 when the lights were going out all over Europe, four disgruntled hunters had emptied their Krag rifles in senseless fashion high into the butt log of the old beech. The steel jacketed bullets had sunk deep into the hard, tough wood that had withstood nearly two centuries of buffeting. The bark that had born the scars of the sharp clawed bear, and the initials of the boy and girl now carried the mark

of the bullet—twenty round holes that would gradually close over and hide the metal that lay buried beneath.

Forty-five years later a forester with a paint gun sized up the old beech. He sounded it, and estimated that it would yield merchantable lumber if the first six feet above stump height were long-buttied. The diameter and the merchantable height were taken and recorded in a scale book. Then a splotch of yellow paint was squirted at breast height and below stump height. The tree that had served the wildlife of the forest for so long would now serve man, but its place in the forest would be filled by thriftier trees.

The power saw ate quickly into the charred wood of the stump, and the great tree crashed to the ground like a Goliath felled by a pebble. The cutter poked a stick into the hollow that had sheltered so many bears during their long winter sleep. When he struck solid wood, he made an exploratory cut above this point to make his long-butt. Through two hundred annual rings of wood the power saw ate until it reached the pith. The cutter let his saw idle and stooped down to examine the saw dust for signs of rot. Two centuries of American history lay at his feet in that little pile of sawdust. Daniel Boone had roamed the dark and bloody ground of Kentucky and Tennessee; Fort Pitt had risen at the forks of the Allegheny and Monongahela Rivers, and had then fallen into rubble; the Declaration of Independence had been signed; there had been the terrible winter at Valley Forge; then the British had finally surrendered at Yorktown; a great naval battle had been fought on Lake Erie; years later the Union had been threatened from within, and there had been the battles of Shiloh, Bull Run, Antietam, Fredericksburg, Gettysburg, the Wilderness, and then a man in blue and a man in grey had met at Appomattox—all this had



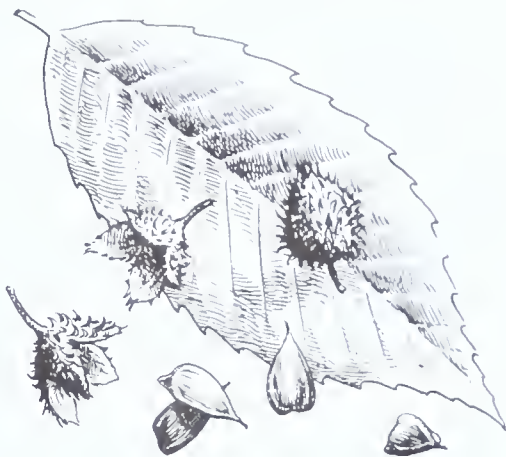


happened on the American Continent during the life time of the old beech. But the cutter was thinking of other things, and in a moment more the long-butt was completed and rolled aside. He saw no indication on the bark that metal had penetrated at high speed into the wood. He swiftly bucked up the tree into two sixteen-foot logs and an eight footer, scaled them, and moved on.

Now all that was left of the old beech after the logs were skidded and loaded onto a truck was a hole in the sky, a hollow stump, and a huge top of broken limbs that covered a spot as big as a small house.

The butt log was the first to be rolled onto the carriage at the saw-mill. The band saw of thin steel rotating at a speed of 8,000 feet a minute could slice through the hardest wood as easily as though it were cheese. The carriage moved toward the saw. The first cut removed the slab containing the grey bark with the initials of the happy couple and the claw marks of the bear. Another cut, and a wide board went gliding on its way to the edger and was followed by two more boards. The band saw had bitten in for the fifth cut when there was a shattering noise. Before it could be brought to a grinding halt, the saw had chewed through twenty steel jacketed bullets concentrated in a three-foot section of board.

The bullets that had been fired into the old beech the year that the German hosts had invaded Belgium caused over four hundred dollars worth of damage to the mill forty-five years later. Fortunately for the mill workers, the hunters had emptied their rifles into the tough, close grained wood of a sturdy beech. Had the tree been a hemlock, pine, or a basswood, the softer wood of any of these species would have held the bullets only loosely. As a result, they could have been pulled down against the guide causing the band saw to



literally rip apart in spirals of steel that could have lashed out in all directions through the mill like a hydra-headed cobra. Any man struck by one of these murderous ribbons of metal could have been seriously injured or even killed because nearly half a century before men had thoughtlessly shot into a forest tree.

The heaviest concentration of bullets occurs in a tree when it is used to support a standard printed target. If the marksmanship is of high quality, a nearly solid mass of metal will be grouped inside the target area. Years later, when the tree is harvested for lumber, a sawmill operator will have to dig deep into his pockets to pay the bill for damaged mill equipment because a live forest tree was used for a target.

A forest tree is the noblest and highest form of plant life. It shelters and feeds the wildlife of the forest. It conserves the precious top soil, and it protects our priceless water supplies. Its wood is used in thousand of different ways by man. It is a living, growing thing that bullets alone cannot kill, but it deserves better treatment from hunters than to be used as a target. And where steel jacketed bullets are used for target practice, a sawmill worker may be seriously hurt years later in a delayed action that started from a hunter's trigger finger.

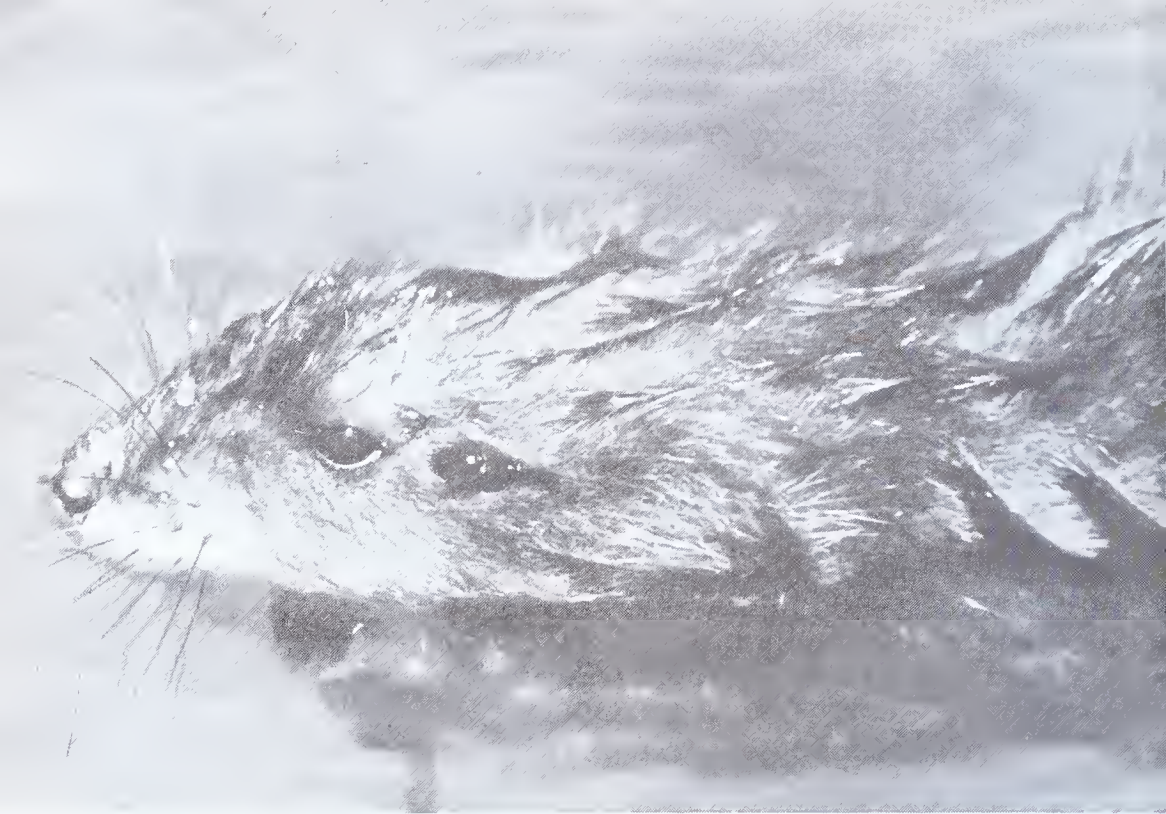


Photo by Leonard Lee Rue

# Our Respectful Rodent

By Wilbert Nathan Savage

**“BROWN GOLD!”** Thus did a successful marshland trapper describe that common but much sought-after furbearer—the muskrat.

The broad expanse of southern marsh was looked upon by the trapper as his new “claim.” The happy step from prospector to discoverer had unmistakably been accomplished, for all about him were abundant signs of furry “nuggets” to be had for the taking.

“Some years have been good, some disappointing,” the trapper recalled. “But in any case, just as in the mining of real gold, the worthwhile harvesting of ‘rat pelts depends mainly on just two things: good fortune and that changeless old standby, hard work. You can dawdle and earn three to seven hundred dollars a season. Or you can work like a

logging horse, get a lion’s share of that blessing called *luck*, and end up with five to eight thousand dollars, depending . . .”

The comparison of muskrat trapping with mining for gold is perhaps a bit far-fetched. But where ‘rats are really plentiful—as in Louisiana, for example—there is at least some trace of resemblance in the pursuits. Certainly the spark of similarity is fanned by the fact that up to twelve million ‘rat pelts annually hit the market with dollar-impact adding up valuwisewise to the exciting equivalent of a nice little mountain of gold dust!

But economic peerage be hanged! The muskrat would be worthy of much study and some admiration even if top price for his pelt never exceeded half a dollar. Like most creatures of the wild, his private life



contains its own special set of question marks. Such as: what does the furry fellow eat? Where does he live? How about his family affairs? Is he really a close relative of the common rat? Are his enemies many or few? How intelligent is he? What trade names have been attached to his pelt? . . .

Mr. Muskrat, first of all, enjoys variety both in the choice of his food and his abode. He'll eat anything from a river mussel or a bullhead to skunk-cabbage hearts and roasting ears. His home may be in a creek bank of a self-constructed house built of mud, weed stems, and assorted swampland debris. As for family affairs, he's so prolific that his up-to-five-litters-a-year breeding habits must shock some of the extra-prudent, strait-laced dwellers of animalland. Certainly there is good reason for raised eyebrows and outbreaks of gossip when a single female manages production of as many as thirty-five to forty babies in a year!

The muskrat could have more ac-

curately been named "muskmouse," for his closest known relative is the common house mouse, and not the rat. In the muskrat's enemy department, four names stand out most threateningly: the fox, mink, great horned owl—and man. How intelligent is Mr. 'Rat when compared with such intellectuals as the fox and the mink? The answer, in just two words: *not very*. But fair play dictates addition of these facts: he's tidy, industrious, moderately sociable, and peaceful by nature. Females are said to actually "visit" among themselves, and males get along together except during the breeding season. When attacked, the muskrat will show great courage—even when battling the bloodthirsty mink. But the monotony in this sort of encounter has been the same for centuries untold—the muskrat seldom wins.

When we come to the names under which the muskrat has masqueraded, we find a somewhat striking example of man's enterprising inventiveness (or should we say, "permissible decep-

**MOST VALUABLE FURBEARER** in the nation is right at home in the water and is lost without it. Although prices for muskrat pelts have dropped somewhat in recent years, muskrat fur is still the staple of the fur trade.

Photo by Leonard Lee Rue



tion?") For Br'er 'Rat has gone—wholly without his permission or approval—into milady's wraps bearing such enchanting finished labels as Hudson seal, river mink, Russian otter, red seal, and a few others.

Sixty-five years ago a muskrat skin was worth little more than a ground-mole's pelt. Gradually, their value climbed. Fur buyers learned that the muskrat's pelt had a durability rating of roughly half that of the otter's fine skin. After a while, the demand for pelts of certain "accepted" fur-bearers fell off sharply, with quoted prices in some instances plummeting to incredibly low levels. The big surprise among furriers was that the muskrat held firm. The time arrived when a prime pelt from a two-and-a-half-pound 'rat brought more cash than the top-grade hide of a red fox or a big raccoon.

In recent years the popularity of the muskrat skin in fashion centers has not diminished, despite fluctuating trends. Muskrat fur is still the most talked-about fur in the industry. The big fur buyers refer to the muskrat as "a steady, reliable, popular fur. . . . It has pulled us through many a bad year when long-haired furs pass out of the market. . . . Actually, the muskrat has been so dependable that it has become the staple of the trade, and sort of a barometer for the whole fur business." (These quotes come from *Fur Auction News* which represents an area between New York City's 23rd and 33rd streets. Approximately 90% of the country's raw fur business is carried on in this section of the city).

Louisiana produces from one-third to an occasional high of nearly half of all 'rat pelts taken in this country each year. But the best quality pelts come entirely from colder states—Minnesota, Michigan, New York, Wisconsin, New England, and our newcomer, Alaska. Good quality pelts also come from Ohio, Pennsylvania, Illinois, etc. The very finest pelts, of

course, come from Canada. The colder the climate the better the fur. Dark, silky pelts of highest premium value come from Ontario and the James Bay region. It isn't too uncommon for the largest of these superior 'rat pelts to ring the auction bell at five dollars apiece during a good buying season.

While professional trappers provide most of the 'rat pelts for those sleek four-hundred-dollars-and-up coats, there's another individual who figures importantly in the supply department of fur-fashion glamour—the farm boy. For across the entire country no other creature outdoes the 'rat in furnishing pocket money for rural lads.

How well I remember my own line of eight or nine choice 'rat sets—the bleak mornings when no creature had stirred along the frozen creeks the night before; and then the glorious trips that yielded from one to three glossy-furred 'rats. On those liberal mornings, even in a chilly February downpour, the world somehow looked just right to me. But bewilderment sometimes outranked the thrills—viz., the time a big mink ruined a 'rat pelt when he decided to dine on the luckless animal. To add to my chagrin, a neighbor boy later became twenty dollars richer when he caught what I believed to be the same notorious mink.

For many people, particularly in the South, muskrats provide tasty meat. Adding to the value of the fur, the trapper can sell the animal's carcass to meat dealers or directly to restaurant owners for up to forty cents. And, believe it or not, in most southern cities in tidewater areas there's no dearth of buyers for muskrat meat! Often known as "marsh rabbit," the meat of the respectable rodent "is not coarse, and when properly handled there is no trace of musk in the tender red flesh. It bears a flavor not unlike that of the wild bunny . . ."



For reasons which may either be linked with personal prejudice or lack of appreciation for true epicurean delights, I don't quite agree. I clearly remember my father bringing home an especially fat muskrat some twenty-five years ago. A Virginia schoolmarm was boarding with us at the time and she persuaded my father to dress out the 'rat. Mother agreed to prepare the meat as the teacher directed. She insisted that 'rat on the menu was a pleasing arrangement in the region where she'd grown up along the Rappahannock River.

My father did manage to eat a sizeable piece of the creature. Mother rebelled at the first bite, and my sister sat staring in utter horror. I ate a small sliver of the meat, but the whole thing was a grievous affair and I was as elated as the schoolmarm when she rejoiced in the fact that there'd be more than enough left for her lunch the following day. I'm convinced that an old-timer in Maryland summed up my evaluation of the muskrat as food in perfect

fashion when he explained while eating fried crow that "it is awfully good for those who like it."

In Pennsylvania, ranging from plentiful to quite scarce, the muskrat may be found in practically every county. The water-loving mammal is happily at home in old mill ponds, beaver dams, lakes, marshes, slow-moving streams, and farm ponds. For such places are apt to produce the foods most enjoyed by Mr. 'Rat—sedges, rushes, wild grasses, plantains, cattail, bur-reeds, tubers of arrowheads, aquatics such as coontail, and many other forms of wetland vegetation. If truck or orchard crops are convenient, 'rats will often help themselves, but they aren't wasters. Under severe winter conditions the animal may waddle abroad and eat small quantities of tree bark, but not nearly enough to give them a bad reputation among foresters or fruit growers.

Musk rats usually mate in late February or March, with the young arriving 28 to 30 days later. They

**MUSKRAT HOUSE** is built of nonwoody marsh plants piled high above the water line, with generous room inside and an underwater entrance. It provides warm and dry living quarters in winter plus a safe refuge against predators.

Photo by Lynwood M. Chase





Photo by Hal H. Harrison

TRAPPERS like this Pennsylvanian are the start in the long process which finally yields glamorous fur coats for the ladies each winter.

grow rapidly and shortly become so boisterous that the mother shoos them out to fend for themselves. This quick weaning system permits the female to produce three or four litters a year. This isn't always the rule, however, for there are many times when a female will raise only one litter a year. In this case, the young are usually allowed to stay at home twice as long as they normally do. Conversely, in the South where the busy little furbearer enjoys greater year-round activity, mating may occur in almost any month and mamma muskrats go to the maternity ward as often as five times a year! Average litter: five or six young, but as many as an even dozen kits have gone into the record books.

The male 'rat becomes exceedingly restless during the breeding seasons and may travel over high hills, from one creek or lake to another. Moved by age-old instinct, he often takes it on himself to build a house or dig a creekbank den. Sometimes wanderlust overwhelms him and he will leave a den or a lodge only partly finished

and move on. Once he completes a house and finds a mate he's usually a model papa, but only on a short-term contract. In time he will surrender all holdings to the missus and pull out in search of new adventures in romance. Violent fights among males during the mating seasons are common.

Outwardly, the muskrat lodge may appear to be a haphazard affair, but it is surprisingly durable. And the inside, lined with grass, shows evidence of orderly housekeeping. The thatched dome is built up of mud and coarse vegetation until there is plenty of room to hollow out the "upper story" living chamber. The entrance-exit is always below the normal water level, and final touches on shaping the living quarters is done by way of the underwater passageway. Several families of 'rats may live in a single lodge, but each family has its own entrance-escape tunnel. The roof of the structure is always provided with adequate ventilation—and *please* remember this if you're ever tempted to use your walking stick to poke into a lodge just to hear the frightened occupants go "ker-plunk" into the water.

Creekbank dens also have their openings under water, with the tunnel angling upward and ending in a snug hollowed-out living chamber and a separate ventilating shaft of the smallest possible dimensions. A muddy stream, when no rain has occurred, often means that Mr. 'Rat has his excavating machinery in full-time operation and is tediously working the dirt down the passageway into the creek. In pastured fields, always a favorite with 'rats, livestock often break through into the dens and ruin them.

Floods may drown very young muskrats in either type of dwelling, and droughts work against the animal by exposing the "door" to his refuge. Under ice, the 'rat often forages for whatever food he can



find. It is said that he automatically memorizes breathing stations under the ice. Known as "push-ups," these local conveniences consist of nothing more than heaps of weed stalks which extend above the surface of the water and the ice. Small pockets are thus formed, into which the 'rat can thrust his nose for refreshing gulps of air. Some observers claim the muskrat fashions these miniature hummocky tangles before winter arrives. Others say the air stations are natural "bumps."

For his digging operations the muskrat is well equipped with five toes on either front foot, four on the rear ones. His track is easily identified. Although he seldom weighs as much as  $3\frac{1}{2}$  pounds, he is a master burrower. Average length is about sixteen inches, plus a hairless ten-inch tail which, like the beaver's may be slapped on the water to warn other 'rats of approaching danger. The animal has a strange built-in need for moisture, and even if it comes in the form of ice water he doesn't mind at all. Muskrats never hibernate, but they may stay close to shelter during a particularly bad spell of weather.

Here, briefly, are eight answers to questions sometimes asked about busy little *Ondatra zibethica*: 1. He gets his name (the animal is also known in some places as muskquash) from the fact that he carries a pair of musk-scent sacs near the base of the hind legs. The fluid once was valued as an ingredient for certain medicines but today it is worth little except for limited use in the manufacture of animal lures.

2. Muskrats *cannot* remain under water without air for long periods of time. If you have ever watched a 'rat submerge and fail to reappear in a few minutes, it simply was a case of his giving you the slip while he surfaced quietly in some secluded spot.

3. The muskrat is so affected by polluted streams that he is soon killed or driven away by the contaminated waters.

4. Melanistic 'rats are rather common. These heavily pigmented coal-black specimens represent the exact opposite of the less plentiful pigmentless albino.

5. It is a very rare thing to find rabies among muskrats. They also show a surprising freedom from parasites—certainly a tribute to the cleanliness of their habits.

6. Muskrats do not hesitate to work, play, feed, or travel by day, although they are generally nocturnal in their habits.

7. While the muskrat has a very efficient set of teeth and sensitive, water-tight ears, he'd never get by a rigid physical on eyesight and sense of smell. He is by nature a trusting soul and does not hesitate to step squarely into a trap he can plainly see!

8. It is true that some mammalogists divide the 'rat tribe into 14 separate types. Others draw the line at nine varieties, but in any case they're all very similar—even the round-tailed Florida muskrat and the water 'rat of the Everglades.

Finally, the big question: "Will the popularity of the muskrat continue to make it the most valuable item in the fur business for many years to come?"

Veterans in the fur trade confidently reply with just four words: "Yes, we believe so."

Oh, yes, how about the opinion of the poor, exploited, unconsulted muskrat? Well, he's undoubtedly lobbying for a hurry-up plan which will bring back enough ultra-exotic, super-competitive furs from Mars or some other celestial trading-post to knock the painful popularity of his own pelt for a loop!

# He Who Hunts Alone

By H. R. Wambold





ANOTHER year had passed as Pete again unpacked his gear in camp. Tomorrow deer season opened, and Pete was sure this was his year to get his first buck.

Before dawn the next morning a file of six men silently climbed the ridge, dropping off one by one at their favorite stands. Pete chose the far point of the ridge, settling down on stand about thirty minutes before opening time. Another hunter cutting in below, settled on a watch about ninety yards away, and directly in line of Pete's fire. The season opened with two shots back on the ridge, and he saw the deer coming out the side.

Spotting the buck he raised his rifle, but over the sights the red of the hunter below came into the field of view. Unable to shoot Pete watched, as the hunter below missed. The buck bounced off into the hemlocks.

Disgusted he decided to move, but couldn't see any point in going back to tell his companions of his decision. He figured being back at noon, and didn't want to chance spooking any deer that might still be on the ridge.

So without letting anyone know he worked his way down the point. Working up the hollow and up the next ridge, he entered strange new country. Having never hunted this flat before, he found several fresh deer prints, and no sign of hunters having passed through. Finding a rock ledge overlooking a nice bench, he settled into a comfortable seat watching the area below him. After an hour of patient watching he spied a single deer coming along the bench below. Then he saw the rack. As he raised his rifle the buck stopped. Testing the wind, he turned nose high.

A large beech hid most of the buck—just one step forward and he would have the opening to place a good shot. He stepped, carefully, rifle ready, and then he was falling! Arms flailing thin air—stones clattering

down over him—as his rifle bounced down over the side. A flash of pain—then darkness!

Waking later he found himself lying on his left side facing the bench below, a distance of about twenty feet. He was unable to pull his left arm out from under his body, where it was pinned under his chest. His right arm was free, and he found he could move it about in normal fashion. But his legs and waist seemed dead and without feeling. When he tried to speak he found that he couldn't utter a sound other than a whisper!

After several minutes of bewilderment and hysteria he decided he must have broken his back or neck in the fall. Afraid to lift or move his head for fear of further injury, he lay there as the forceful silence of the woods pressed upon him.

Then he realized what a fix he actually was in. No one from his camp knew where he was. With his watch on his left arm pinned beneath him, he had no idea of the time of day, and could not call for help! His companions would assume him lost after dark, but would not know where to hunt for him. He was unable to build a fire for a beacon!

As panic and hysteria again gripped him, he visualized the headlines in the papers—"Search party combs woods for lost hunter." Then finally the macabre headlines—"Search party finds frozen body of lost hunter."

A flash of color on the ledge above! About eighty yards away he saw a hunter settle down on watch. The attempts to call were futile; his rifle was nowhere in sight; there was no way to attract the attention of this hunter!

Sobbing with frustration he prayed. The crash of two shots brought him back to reality. Searching with straining eyes, he found that the hunter was gone. Then he spied movement below as some deer ran past, then the hunter following in their tracks,



checking for a blood sign of a hit.

Grasping his cap he waited till the hunter was almost below, and threw it in a flat sailing cast towards the man. Seeing the motion the hunter spotted the cap, and looking around finally spotted the waving arm in the rocks.

It was after dark till they got Pete off that mountain, and the leaves were again on the trees by the time Pete shed the cast of a broken neck.

The day he left the hospital he realized what a lucky guy he was, for he could have been laying on that ledge, a frozen corpse! Resolving that never again would he venture anywhere alone in the woods without someone knowing about it, he headed for home.

It is a proven fact that most accidents that happen while hunting are due to carelessness on the part of the individual or individuals. Most of us, when we hear the term "hunting accident," immediately think of someone having been shot accidentally. Actually the percentage of shooting accidents is far less than that of personal injuries suffered annually by hunters. The above story though fictional, was written with the admonishment to all who are guilty of having hunted as Pete did at one time

or other. Remember it, and always leave your buddy or someone know where you are going, when the urge to explore new country gets the best of you.

Too many hunters enter the forests of Pennsylvania every year without the necessary respect for the big woods. Falls of all sorts can be experienced, if the hunter is not aware of the conditions that cause them to occur. The results can be minor in personal injury, but can also be very serious.

Travel side-hills with extreme caution, watch your footing and keep your hands free to use any available brush or tree to stop sliding. A carrying sling for your rifle is invaluable for this purpose. This enables you to have both hands free for this checking of your slide.

Travel slowly, watch your footing, place your foot down firmly. Shift your weight smoothly from one foot to the other, and above all, stop when looking around, so your attention can be concentrated on one thing at a time. When you start moving again, keep your thoughts on your footing, and be prepared at all times for that slip or that small stone to turn under the leaves. Do not walk to the very edge of a ledge, no matter how solid it may look. Too many dangers are hidden under the leaves or brush, or under the snow. Large and solid looking rocks can shift under very little weight, and cause falls of dangerous results.

Travel in terrain suitable to your age and physical condition. Don't try climbing up the steep side of a ridge in one continuous scramble. Stop and rest, get your breath and take it in stages. Pause just before you put your head over the top. If you should find a shot awaiting you when you look over the top, that pause may mean the steadiness you will need to make a good hit. But of most importance is that the stops on the way up can avoid a heart attack! No one can as-



sure himself of possessing a heart immune to this possibility due to the strenuous exertion of climbing the side of a mountain, regardless of age or his physical condition!

Choose your footwear with care. Make sure your shoes fit properly—not too tight, but with the proper support for your ankles. Wear woolen socks, but avoid putting too many pairs on your feet so that your shoes fit too tightly; this will stop circulation. Loose shoes cause blisters from rubbing, and can become very painful, and in some cases become infected from the dye in your stockings.

Use a shoe with the type of sole which insures footing suitable for travel on rocks, loose dry leaves, or snow. Avoid smooth leather soles; they are no good for any type terrain, and become extremely slippery in dry forest conditions. Ripple soles, crepe rubber treads, or cleat rubber treads seem to be the best type to use.

If you intend to hunt strange country invest in a topographic map, and get some idea of the terrain and surrounding area in which you intend to go into. Avoid the embarrassment of being lost, buy a compass and learn to use it. It can prove to be your very best friend at the proper time. Always carry plenty of matches and a few chocolate bars. The comfort of a fire and a bar of candy to munch on are a great help to your morale, should you have to spend the night in the woods. If you should have to spend the night in the forest, do not roam around in the dark; that is utter foolishness! Instead spend the last hour of daylight gathering a supply of firewood, so you can keep your fire going. Remember that fire can be seen for miles, to say nothing of the comfort you will get from it on a cold night. Do this, and wait for daylight to resume finding your way out! Carrying a small flare type fire starter in your pocket at all times will insure your getting a fire started regardless of how wet it may be.



If you hunt with the bow do not carry an arrow nocked while moving around. Nor is it wise to carry extra arrows in your other hand. A slip or fall can mean self inflicted wounds, not necessarily from the hunting head, but from the nock as well, or from a broken jagged end of a shaft.

When a group of hunters are working up a side hill, it is safe practice not to have a shell in the chamber of your rifle. A slip or fall can discharge a shot, and it requires very little time to jack a shell into the chamber, should the chance of a shot present itself.

Use a little common sense, and proceed with caution bearing in mind the safety of others and yourself at all times. This will result in many years of enjoyable hunting without the inconvenience of personal injury to yourself or your companions. Bear in mind that the forest is not man's natural habitat; he is not endowed with the natural instincts and ability to roam this terrain. He must adapt himself to conditions that prevail, and make use of the proper judgment and apparel to travel safely and comfortably. Together with good

hunting manners, consideration for others, and the common courtesy due all fellowmen, this indeed can be the "sport of kings" enjoyed by all, with only a pleasant memory to remind one of days gone past in this greatest of all privileges we engage in.

#### Footnote

It has been my personal experience to visit a camp where several of the members are avid "still" or "pot" hunters, and prefer to go out on their own at times. But at the same time, through an actual experience in their camp, they have learned to realize the many odd accidents that can happen when out alone. Here is their solution to the problem:

A rough map of the area around the camp was drawn up by a few of the more artistic members, with the aid of a "top" map of the local quadrangle. This map shows all the ridges, benches, flats, swamps, creeks, and roads found in their hunting territory. Plus the many points, crossings, etc. which have acquired pet names through the years, and which all members of the camp are familiar with (such as "Randall Clearing," or the "Sawdust pile trail," and the "Eight point drive," plus many others). They have this map mounted on a sheet of plywood, and covered with a sheet of clear celluloid. It

hangs on the wall at a prominent spot near the door, and next to it is a china type marking pencil on a string.

When anyone gets the urge to try some section on his own, either to still hunt, or to sit and sweat some run, he leaves the rest of the camp know just where he will be as follows: Taking the pencil, he draws a line showing the route he will be taking, and the area he will be in. A straight line denotes getting to a spot to sit, and a zig-zag line denotes a still hunt tour. Then the hunter puts his initials inside a small circle at the end of his route line. This way the rest of the camp know at all times the general area of any of the men who are not with the gang for that particular day's hunt.

When the hunter returns to camp at the end of the day's hunt, he erases his markings with a damp cloth. Thus the map is ready for the next man's tour! This map has helped many of the men get their deer out in much less time due to the rest of the gang when coming in having found that such hunter is not yet in camp. Sending several of the men over the route to check, and finding the lucky hunter puffing and sweating, dragging in his buck.

This sensible thinking some day may also save someone's life!

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### BOUNTY PAYMENTS TEMPORARILY DISCONTINUED

Pennsylvanians are reminded: The Game Commission will not pay bounty on red foxes or gray foxes or great-horned owls killed during the period October 31 to December 31, inclusive, this year.

This information is repeated in the hope that hunters and others will save themselves the trouble and expense of sending fox skins or the bodies of great-horned owls killed between the date the small game season opens and January 1, 1960 to the Harrisburg office of the Commission.

Rewards of \$4 for each red or gray fox and \$5 for each great-horned owl, killed in a wild state in the Commonwealth prior to October 31, 1959 and after January 1, 1960 and presented in the manner prescribed by law will be paid.



# Pennsylvania Snowshoe Hares

## -- A Status Report



PGC Photo by Steve Licinsky

By Dale E. Sheffer

Game Biologist  
Pennsylvania Game Commission

**W**ITHIN recent years the snowshoe hare in Pennsylvania has undergone a drastic reduction in numbers and many areas that were once productive are now either devoid of "white rabbits" or support only token populations. The threatened loss of this popular game animal prompted the Game Commission, through its Division of Research, to embark on a study of the situation several years ago.

As part of the investigation, restoration attempts have been made by introducing stock from New Brunswick, Canada. Hare releases have been largely confined to those areas no longer supporting these animals.

The current program was inaugurated in 1956 when 137 hares were purchased and released at five sites containing no resident snowshoe populations. The following year, 500 were liberated at 11 locations, some of which supported a few native hares. A mass release of 122 snowshoes was made at one site in 1958, and in 1959, 500 were liberated at 13 locations known to have supported hares within the past 10 to 15 years.

Thus far, the results have been somewhat encouraging. It is too early, however, to draw definite conclusions. Of the 17 releases made prior to 1959, a degree of success has been observed at 10 sites. Com-

plete failure was noted at five liberation areas and two remain to be investigated. Insufficient time has elapsed for a conclusive evaluation of the 13 sites used in the 1959 liberations. Additional experimental releases are scheduled for 1960 and 1961.

The information gathered to date strongly suggests that the lack of suitable habitat is one of the principal causes leading to the decline in snowshoe numbers. This loss of food and cover is due to the natural maturation of our forests and the excessive browsing by a large deer herd. In combination, these factors have rendered large portions of the former snowshoe hare range untenable and has driven the hares into small pockets of remaining habitat. These isolated and often marginal units, in turn, render the snowshoes vulnerable to hunting and other pressures.

All of the releases exhibiting a degree of success were made in areas which have undergone recent habitat improvement. The improved habitat, in turn, is the result of forest cutting and the control of the deer herd through antlerless seasons.

Further investigation includes periodic checks on release sites to determine survival and growth of hare populations; selection of additional sites showing a potential for snowshoe liberations; and experimental cover or habitat manipulation. The latter phase, which entails experimental cuttings and possibly plantings, includes:

- a. Habitat manipulation prior to hare release
- b. Habitat manipulation in areas now supporting hares
- c. Release of hares with no covert management
- d. No habitat manipulation and no release (control area upon which to compare results obtained in phases a, b, and c).

While this three-phase investigation will provide the Game Commission with much needed information, the ultimate success in re-establishing this game animal over portions of its former range will depend to a large degree on the cooperation received from the snowshoe hunter. The snowshoe does not have the reproductive potential of our cottontail rabbit, thus the hare needs additional time to establish itself in appreciable numbers.

If you, Mr. Sportsman, refrain from hunting in areas where you know the Game Commission has recently released hares, the chances of perpetuating and improving your sport will be greatly increased!

LIVE-TRAPPED SNOWSHOES from New Brunswick, Canada have been released on 17 areas within the past few years. Results have been encouraging although no definite conclusions have been possible in the short period of research and study.







# I'll Never Miss

By Fred G. Royer

I SUPPOSE our deer camp is no different than thousands of others throughout the state, at least not any different in respect to the wall full of shirt tails, or the opposite wall bearing congratulations to successful "deer slayers." And I imagine the memories cherished by both these walls are no more hallowed, nor talked about more, unless they are both remembered as being part of the expected deer camp life. Then too, I imagine it is inevitable, that like other camps, our reserved wall for shirt tails has grown larger in size and memory than that of the opposite wall of congratulatory tags to those who have used the deer rack placed between the pines in front of camp. Perhaps 11 years of hunting experience has cut down the consistency of shirt tail "hangings," but nevertheless, the "hangings" take place annually.

There are, however, a few members of camp who have—let's say—taken the pledge that they will never miss again. I am one of those. "I'll never miss again." You say this is a pretty strong statement for a young whipper-snap to make after actually only hunting deer for 9 years. Well perhaps, but before you judge, let me relate some of my experiences to you so that you may better understand this boastful pledge.

My first experience, at the age of 19, unfolded in Potter County, in a newly formed deer camp. Being the youngest of the members, and overflowing with enthusiasm, Sunday night before opening day found me subject to many, undoubtedly priceless bits of advice on the art of deer hunting. Therefore, on Monday morning I was completely equipped with advice as well as the best oiled and polished sixteen gauge shotgun, loaded with rifled slugs, and a complete lack of knowledge of deer. But as is always the case, lady luck looked at me, smiled, turned the smile to a leer, and then played a very dirty trick on a perfectly unsuspecting novice, which in turn gave me one of my fondest memories of a truly great sport.

My partner, John Helter, being a real sport had decided to take me under his wing. To show you what kind of a sport he really is, he also had decided to attempt to kill his buck armed only with a 45 revolver.

The fact that John was going to be harnessed to an enthusiastic beginner, plus the amazing thought that he would carry only a 45 revolver on opening day, left some of the members wondering if rolling him out of the sack at 4:30 A.M. had hampered his thinking capacity.

We had decided to work the ridge south of camp, on the east side. It was a perfect day in my book. Fresh snow was falling and my first few minutes on the ridge allowed me my first look at the speed and cunning of several doe as they cut down the side of the ridge. And before long, my partner fulfilled his desire to attempt to kill a buck with a 45. He did just that! An 8 point buck broke across a trail at 20 yards, directly in front of him, and he attempted to kill it with the revolver. Later, as the deer broke over the top of the ridge, a neighboring camp rifleman killed his badly frightened buck. As I ribbed John about his miss, I must admit that I secretly wished that I also could get a chance like that. Boy, did I get the chance!

No more than half an hour later, I moved ahead of John on the flat above him, and after moving front about 250 yards, I stopped for a breather before moving up the ridge. There I made my first mistake. I stopped without any cover in front or in back, and to add a little to that, my position was very uncomfortable. But before I could realize that I was not prepared, a glimpse of brown off to my right froze my position. Then the excitement took its hold; I eased the shotgun to a firing position, but I forgot that I was standing, and I didn't realize that deer could move just as slow as they could fast. A doe appeared. The advice from the night before came to me. Buck usually follow doe. Then another doe; more remembered advice said, many times if you see more than one doe, especially on opening day, watch out because your chances of having a buck with them



are pretty good. The shotgun was getting heavy, but I couldn't move. Then out stepped a buck. The biggest racked deer that I've seen to this date, I counted 12 points. They were moving toward me. I figured they would pass about 40 yards directly in front. Then came another legal buck, this time I saw 6 points. The shotgun was now a piece of lead. My nerves were raw. I knew I could not help but get one of the two, no matter what happened, and 12 or 6 pointers weren't to be sneezed at. Then out stepped a third just a 4 pointer. My first thought then was that nobody would believe me when I got back to camp, dragging the big one, that there were two more with him. And on they came, as another fevered minute eased by. The doe were in front of me, my arms ached into my back. The buck didn't know I was there. I made my decision, the 12 pointer. As soon as he steps between the two big trees directly in front, that's when I'll shoot. Just as his head went behind the first tree, the doe stopped. They seemed nervous. I was frantic! The big buck showed only a hind quarter. The other two buck were in the open watching the doe. Seconds added another minute, and the shotgun added another pound to the dead weight dragging at my arms. Again I made my decision. I



would wait until the big boy stepped out, rather than shoot one of the smaller racked buck. Then he stepped! His first step carried him half way down the ridge. The other buck in hot pursuit, had completely wrecked my plans at a standing shot. Then I forgot all the advice handed down to me on Sunday night. And I began to frantically open fire as if I were shooting pheasants back in Lancaster County. Several shots later, and two ejected unfired shells later, my three buck were out of view. Enthusiasm, tension, and disgust, had built to an overwhelming point, so I relieved my disappointment by sending my foot at a sappling, which did no more than give me a sore foot for the next few days. My partner, fortunately had gotten a look at all three buck so at least my story was believed back at camp that night, as they hung three shirt tails on the wall.

My next experience found me more fortunate. A buck which had broken out of our drive headed my way after being missed by another of our party. This time the action reversed my first experience. I picked my opening and just before he came through, he stopped. But he was completely hidden. I knew how to expect him coming out, at full tilt headed up the ridge. He did, but this time I was ready and I had my first buck, a six pointer.

The following year found me over anxious as I took a distant shot and missed, at a buck that would have passed in front of me within easy range.

Other camp experiences were also adding to my knowledge of deer hunting. Like the year Art Bowman taught me a never to be forgotten lesson. This lesson started when Art had a buck break into our drive from behind the drive. His trusted rifle and experience had picked an open spot, and a good shot. But when Art walked over, the buck was

not there. When the drive came out, no one else had seen the deer. Art was sure of his shot, so we went back over the area, but no buck or sign of him. Arts' persistence took us back again, and the boys were beginning to wonder. After gathering on the road to re-organize, Art still insisted that he had hit the buck. And finally, a last search was made. Sure enough they found the deer stone dead, and Art got a spot on the congratulation wall rather than the shirt tail reservation.

Now let me couple this with one more experience that occurred after killing my third buck. It took place on the same ridge as my first experience, on opening day of '57. I had placed myself on the point this time. My buddy Walt Bard being several hundred yards behind and on top of the same ridge. On several occasions Walt had literally had from one to three buck walk over him at the same spot during off season visits to camp, so our choice was naturally in that area.

About nine a heavy snow squall developed, and within minutes I caught a quick motion to my right. It was a doe moving fast, not on a run, but determined to get around the point without wasting much time to a destination that she alone had decided upon. Then another doe, and quickly following came one, then another buck. They were moving fast and the point was narrow. My time was limited. A quick look at racks through the snow told me that they were about equal. I decided on the first one as he reached an opening directly in front. If I missed I could still get a crack at the second. He reached the spot before I was set, so I quickly swung to my last open spot. He came into it, I squeezed, and he was out of view. I swung on number two. He had froze at the sound of the shot, and was standing directly in front in an opening. I leveled on him. Then I

hesitated. My first shot should have been good. I could not see if he fell, he merely went out of view. But I believed I had hit, and with confidence I eased the rifle down, and left the second buck standing in front of me. For a second I was again undecided and the second buck stood perfectly still. Did I get the first one, or did I miss? No, I was sure of my shot. I waited a few more seconds, and the second bounded away. I lit a cigarette, lined up the spot where I had shot, and completely assured. walked down to claim my fourth buck. I reached the spot but my deer wasn't there. I re-lined my direction of fire, but no I was at the right place. I frantically made a circle around the area. No buck, no blood, just four distinct sets of tracks leading into and away from my spot. I immediately began to trail, but after 5 minutes I had convinced myself that I had just accomplished the biggest goof of my deer hunting. I figured to be the laughing stock of camp as I would tell how I had missed the first one, than left the second stand in front of me, only to walk away without being shot



at. I moved back up to the point, and resumed my watch, completely dejected, and without any further hope of seeing another legal deer. But about 10 minutes of reliving the action, convinced me that I could not have missed that buck. My curiosity was beginning to get the best of me. Then I remembered Art. Art said he didn't miss, and when he stuck to it, he found out that he was right. I moved back to the spot where the deer had passed, and began to retrail. After about 200 yards of where I had first stopped trailing, I sensed something strange in the jumbled sets of tracks. I wasn't sure what it was. The prints just didn't seem quite right. A slight excitement bit at my dejected feeling. An up-turned leaf from under several inches of snow convinced me that something was wrong with one of those deer. Then I came to the point where three sets of tracks continued out along the flat, but the fourth turned abruptly downhill toward the run in our hollow. The dejected feeling was replaced by an overwhelming urge to shout for joy. I almost ran down the tracks, for almost an hour had passed since the action had occurred. The snow had almost covered the first bed, but the reddish tint beneath the new snow assured me that I had not missed. Within the next 100 yards two more beds proved that my buck had lost a lot of blood. Then I reached the top of the next bench, and scanned the area ahead and there he lay. His rack was nice but showed only four points. But the sight of that four pointer was one of my biggest thrills, for I had found my buck, one I would have wasted.

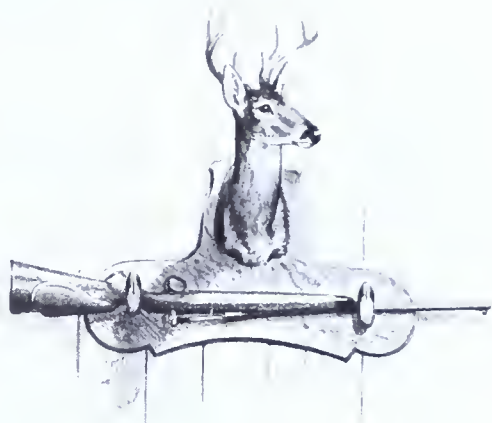
The bullet had entered a little high, and behind the fatal area and had not touched a bone. It had never fully expanded, but had ruptured him badly. Not a drop of blood, nor a single hair had been shed when he was hit, and not until he had



filled internally with blood, was there a sure sign that he was hit.

So you see "I'll never miss again." Well, at least not until I have checked, rechecked, and trailed my deer until one of us becomes convinced that the other is a better and stronger walker. And if it turns out to be the buck, well, then I will at least know that he is alive and unscratched, and perhaps I'll get a crack at him again tomorrow, or next year.

But until I have thoroughly convinced myself that the buck I shot at was a PURE miss, I'll trail him with but one thought, "TLL NEVER MISS."



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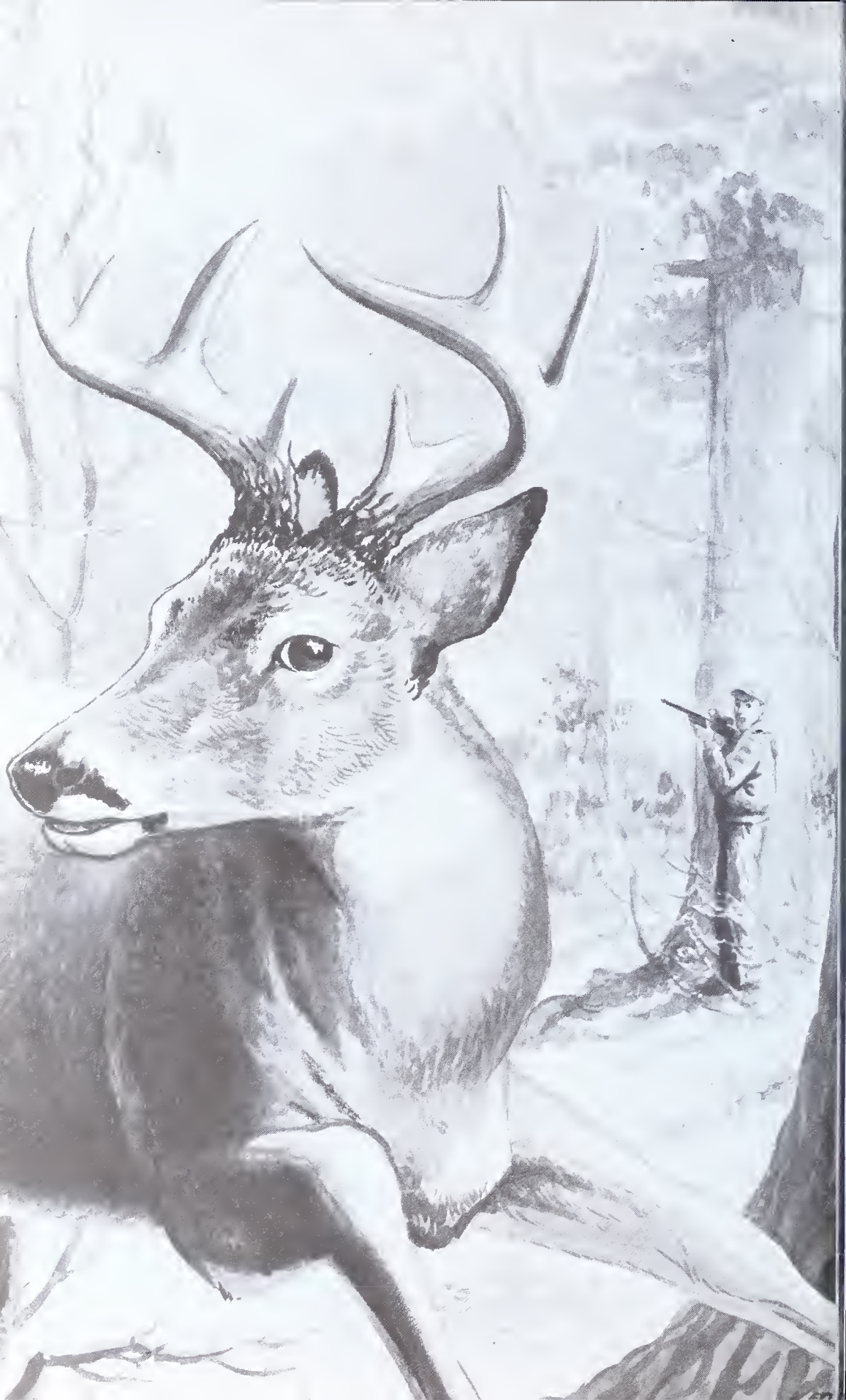
## YOU SHOULD BE PREPARED TO GET LOST

Don't be fooled, anyone can become lost in the brush. This may easily happen in a snowstorm or fog. There is also the possibility of an injury which could prevent a person's return until assistance arrives.

Here are a few precautions taken by experienced outdoorsmen, particularly if in strange territory, just in case: Before leaving home for a hunt tell someone where you will be. If staying at a camp or rooming house leave word before starting out. Obtain information on the way the mountains lie and on the streams and landmarks in the hunt area. Carry matches in a moisture-proof container, or a well-filled lighter, and a strong knife. Some extra food, or candy, may prove valuable if saved for an emergency. For the person who knows how to use a compass, this can be a valuable piece of equipment.

Each year a few hunters become confused, fatigued or hurt in the back country of Pennsylvania. Some are compelled to spend the night, or some of the dark hours in the brush. If the one who is lost remains calm he has little to fear. There are no wild animals to hurt him, and while some of the back-stretch areas in Pennsylvania are vast, he will undoubtedly be located within a few hours—by morning at least. The best plan, if lost late in the day, is to gather a supply of dry wood, build a fire and rest. *Be sure such fire does not get out of control.* At night the blaze will draw the attention of the search party, particularly if built in the open or at a high point. Also, three shots fired in close succession, mean distress. They can guide help to you.

Above all, keep calm. Assistance will arrive in due time. The worst suffering most lost persons in Pennsylvania endure is mental anxiety until found.





# The One-Man Drive

By Bill Walsh

**D**RIVING deer is an accepted hunting pattern in most sections of the east, particularly in the heavily-wooded portion of western Pennsylvania where I hunt with other members of our camp. Usually, the well-planned drive employs the services of a band of drivers—five to a dozen. Sometimes the members of several camps join forces to make a drive more effective.

However, large groups aren't always available. Then, a one-man drive often provides the answer to hunting success. One man—if he's patient; has some deer savvy; and will take the time to study his drive in advance as well as to profit from yesterday's mistakes—CAN do it. I remember such a time.

Mose paused in his restless pacing of the floor to look impatiently out the camp window.

"When it stops raining," he suggested, "Let's drive the camp hill. Bound to be deer under all those hemlocks."

Ed Heberle, sprawled on the davenport after a mountainous breakfast of pancakes and eggs, opened one eye long enough to scorch Mose with a scornful glance, then closed it again in classic, wordless comment. Lester Bolkey removed his nose from between the pages of a magazine and instructed Mose to go back to bed. Carl Ehret grunted in a manner that sounded like he wasn't having any, so I joined the rest of the crew and informed Mose that the heat from the potbelly stove in the corner was going to feel mighty good the rest of the day.

Not that we are a lazy crew. But deer season had come in four days earlier and after three days of slogging through abnormally heavy snows

without a shot, tired muscles found the forced inaction attractive. The rain was putting the snow in its place and the season held eight more hunting days. No one was pressed for time.

The rain that had begun before dawn seemed to be lessening, though, and Mose (Gus Mosher) was impatient to be out. He was probably as tired as the rest of us, but he's a bundle of energy who finds it hard to sit still. He tried another tack:

"Why, you lazy, no-good, city-bred, necktie hunters," he harangued. "I'll drive the hill myself if you'll just get up enough ambition to walk down that nice level logging trail to stand on watch."

"That would be a waste of time," Carl told him. "One man can't drive a hill that big. The deer will get around you."

"I can do it," Mose declared. "If I've learned anything in 45 years of hunting, it's how to move deer where I want 'em to go." Knowing this to be only half-truth, he added, "Especially when I know where THEY want to go."

The old boy might have something, I said to myself, and if he's willing to play hound dog I'll humor him and go along—and there's always the outside chance that he might push a buck through. On the fourth day of the season, the woods are emptied of most of the non-camp hunters who drive out from the cities the first few days. The few who might have planned to hunt this day were probably discouraged by the rains. Finding hunters where you least expect them will often ruin a drive.

So I agreed to stand on watch at the crossing known as the Lilac Bush—where our boys have harvested

many a deer in the years of hunting our camp valley. It was only a fifteen-minute walk from camp.

Carl decided he'd go along to cover a kind of "spill-over" crossing several hundred yards beyond the Lilac Bush—"If the rain stops," he added.

At about noon the rain did stop. Skies remained leaden and threatening but we started off in high hopes—Mose up the hill to the draw into which he would cut when he opened his drive, and Carl and I down the road to the opening mouth of the draw and our stands. We were reasonably certain that the hemlock stand that covered the three-quarters of a mile of the draw held some deer. Only question marks lay around whether Mose could put them to us and whether one would have a rack.

We had twenty minutes before Mose said he'd start his push—fifteen to get to the stands and five to let things "settle" down around us. Both stands were in the open, between two wooded sections and shooting would be fairly easy if deer came.

Unknown to us, Mose had spooked a band of deer long before he'd expected to see any—long before he approached the draw of the drive. They headed into the draw, however, and believing they would not go too far if he held back, he stopped in his tracks to await the pre-arranged time to start the drive—principally to allow Carl and I to get to our posts.

Unknown to Mose—as if to prove the adage about the well-laid plans of mice and men—the deer decided to move straight on through without further pushing, crossing at the "spill-over" stand where Carl was scheduled to be.

Carl and I spotted them as they broke from the mouth of the draw to our left. We spurred ourselves into a difficult run (the rains had melted the snow and had left patches of slippery mush and half-ice) in order to cut the distance between us and

the deer, on the off chance of getting a shot before they disappeared into the woods at our right. This meant they would be in the open for about 150 yards altogether. When we first saw them they were at least 300 yards away.

We narrowed this to about 200, crouching low as we ran. Fortunately for us, the deer had to jump an old barbed wire fence of some height in order to cross the trail and reach the woods beyond. Before attempting the jump, the old doe in the lead stopped for a look around. At this moment, I sank to one knee, put the 8-power scope on the band, and spotted a set of horns on the third deer in line. It was now or never as they stood there in single file. I'm zeroed in at 190 yards with 180-grains so I took the chance and did as fair a job of squeezing off as a fellow can do after running a hundred yards in heavy deer hunting clothing over slush ice and muddy snow. The deer, reacting in a way we had not anticipated, turned in their tracks and re-entered the draw from which they'd emerged a moment or two before.

It was not necessary for Carl and I to have a conference on what to do. If we had been sure I'd missed, the logical thing would have been to remain rooted in our tracks and wait for Mose's drive (he'd just now begun to hoot and holler) to put the deer back out to us—possibly even closer this time. We were certain the deer had not seen us because of the nature of the cover at the side of the old logging road from which I'd shot.

But it is a rigidly enforced camp rule that when a man shoots at a deer which continues to run, immediate inspection must be made to determine whether or not the animal was hit. Many vitally-hit deer fail to give indication of any kind—but you'll find them dead or dying if you ferret out the evidence of a hit and take up the trail.

Dutifully, we inspected the area for



signs of blood or hair. We found none. We tracked the animals back to the edge of the woods and saw no sign of weakness in any set of tracks. Carl looked questioningly at me, as if to say, "What do we do now?"

"Well," I whispered, "Mose is still in there. Let's just take up the stands we originally planned on in order that he won't think we let him down when he comes out. Besides, he might put them out again. Stranger things have happened."

We got in position. Mose's voice drew nearer. It was a wonderful experience to hear how that one man could set up such a ruckus and commotion in the woods. In my mind's eye I could see his tall form hulking through the trees, employing every trick he knows to make his approach resemble that of a platoon.

"Ay-oooop!" he calls, cupping his hands at his mouth and sending the shout dead ahead.

"Ay-ay-ay-oooop!" he sings out a moment later, turning his head to the left, laying a hand at the right side of his mouth, and shooting the sound off to his left.

Stooping to pick up a dead limb, he cracks it against a tree and breaks it in half. He heaves the section in

his hand far down the slope of the hill to his right. Then he turns his back to the direction of his drive and let's go another war whoop. Emitting a series of high-pitched "Whoop-whoop-whoop-whoop-whoops," he slowly turns to his left until he is again facing the direction of his drive. With this maneuver he has sent a series of sounds far out to the right of his route, bouncing them off the trees and the big rocks. By changing tone and pitch, he has sounded like at least a half-dozen eager drivers. I began to catch on to this one-man driving business.

A grey-brown movement in the hemlocks, however, brought me out of my mind's eye and back to the reality of the hunt. A butter-fat doe melted out of the edge of the evergreens and stood, alert, at the rim of the clearing. For several moments she poised there and I felt calm and secure behind the half-screen of the Lilac Bush. The wind wafted in my favor.

The first flush of excitement at seeing a deer passed quickly and I enjoyed watching her. Then the realization rushed back to me that if she was one of the group of four we had sighted before, the others—including



the buck—could be waiting in the hemlocks behind her. I stopped breathing, almost, in order not to spook her.

Mose's driving voice boomed down the hollow. The doe looked back over her shoulder in the direction from which the voice seemed to come. With a flick of her tail she took several steps farther into the clearing and stopped again. As if from nowhere, the second doe now stood on the spot where the first had been.

I dared not turn my head to look at the first one now. Her progress had carried her to a point from which she could have seen me had she looked. The second deer came up to her. Mose's voice called out—much closer it seemed.

"Where are the other two?" I asked myself, my finger on the safety, ready to flip it off. "Where is the buck?"

And then he was there. It happened quickly from there on in. As if at some pre-arranged signal, all four of the deer were in the clearing and making tracks for the fence.

The scope picture was a jumble of grey-brown motion as the buck seemed purposely to hide himself among the does. But, as before, there was a pause at the fence and he stood out, alone, as the cross hairs sought and found the shoulder.

It was then that a moment of hesitation visited me. And although it lasted, perhaps, less than a second, a mixture of thoughts and half-thoughts swirled through my brain. Like a dream—so scientists tell us—that lasts for only a few seconds in our sleep but seems, on awakening to have consumed half the night.

I thought this was not a magnificent buck—not big; not heavy in the rack. On the other hand few of our deer are heavy-antlered any more. If I let him go, would he or would he not have a sportier spread next year? I didn't know. Then, too, after our buck season ended some eight days

from then, a three-day antlerless season had been called. It seemed inconceivable to me that in such good deer country as ours I could hunt for three days without collecting a doe—and if I shot now, the hunting would be over for me and I would not be able to be at the camp and join in the antlerless hunt.

Then there was the thought of Mose and the success of his one-man drive. Didn't I owe it to him to kill this fat little buck with the seven points to prove that he could do what he said he could do?

I suppose it was this latter point that brought decision from indecision. They grey-brown picture turned into a spurt of orange flame as the scope leaped up in the recoil. And the deer was on the ground, staining the dead grass and the occasional fleck of snow left over from the inroads of the rain.

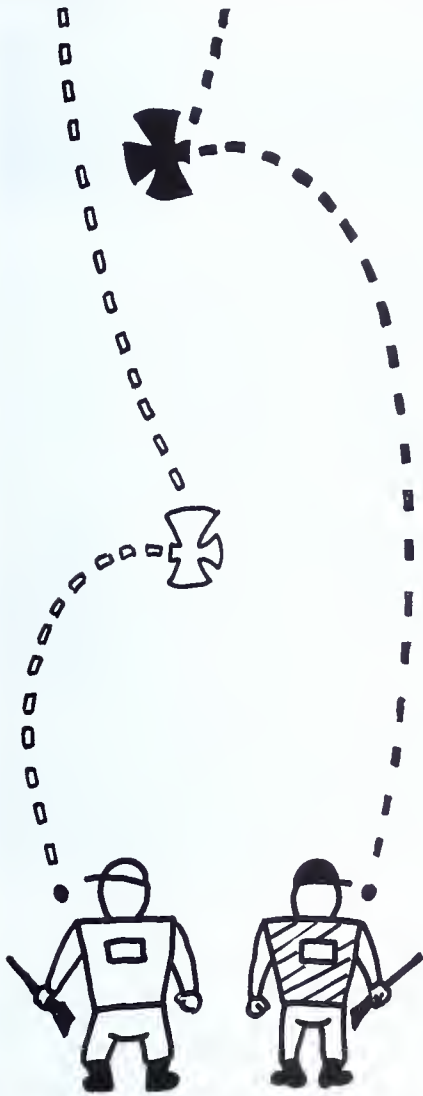
It was only then that I remembered another good reason for shooting that buck—the handsome jackpot of cash waiting in the sugar bowl back at camp for the first deer in. Mose's one-man drive had truly paid off for me. And when you hear him telling about it now, with justifiable pride, you can figure that he got something out of it, too.

It all prompted me to make a serious study of the one-man drive. Several important conclusions have come out of this. First of all, no one-man drive is as effective as a well-planned large drive involving enough men to block most of the escape routes and to man every good crossing in the path of the drive.

On the other hand, when hunting in parties too small to drive in the well-organized manner, the one-man drive will usually show more deer to more hunters than any other method. And you've got to see deer to find the one you're after and to shoot it.

Take the two-man hunting party for instance—one man a buddy hunting from their car on one-day jaunts





**TWO MEN** hunting deer together can take turns driving to each other with the opportunity of seeing more deer than if they walked abreast. The hunter at the left starts it off by making a swing to his left but circling back to arrive at a point about 200 yards ahead of the hunter at the right. A prearranged amount of time is arranged for this. When this time has elapsed, the hunter at the right then makes a swing to his right but swings back to arrive at a point about 200 yards ahead of the first hunter. The path of the drive can be a straight line, the top of a ridge, where a forest meets a lowland, etc.

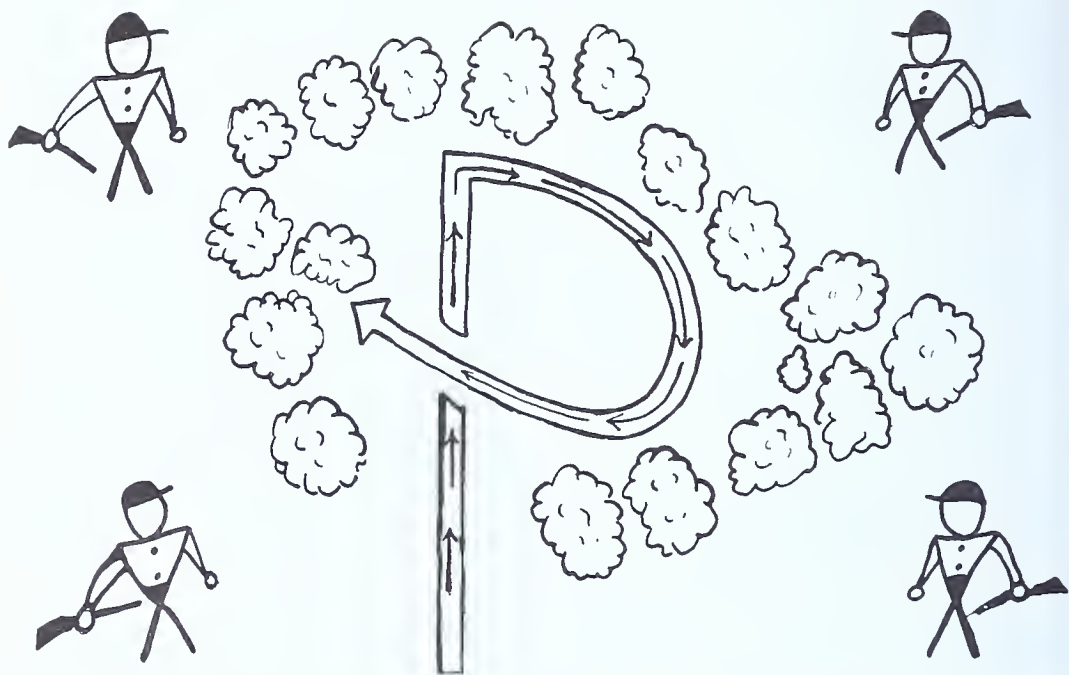
from home. Such a hunting combination will see more deer in wooded areas by conducting drives to each other. These should be short drives in which, first, one man makes a half-circle toward a given point some 300 to 400 yards away, then the second man makes a half-circle approach in the other direction to a point about 200 yards beyond where the first man stopped. And repeat until a change of terrain or cover dictates a different approach.

Hunting parties of from three to five will do better to let one man make short drives while two to four men stand on watch, covering the **BEST** of the available crossings. Oftentimes it is the driver who will shoot the deer attempting to cross behind him. But hunting in this way will, at the end of the day, result in more men having seen deer than had they started out in different directions on their own—all things being equal, of course.

When the area to be driven is small and narrow, a silent drive is possibly as effective as a noisy one. When it's large, the tricks Mose used to advantage can be employed artificially to "spread" the area of the drive.

The time to drive is whenever deer are not being seen via the stalking or lone watcher techniques. It is also wise to drive only when you are fairly certain that other groups of hunters are not using the area. In addition to the safety factor, there is always the chance of having all your plans knocked in the head by some hunter who is not aware of them and who suddenly decides that this is the time to practice his church choir solo, or to jump up and down to keep warm.

As mentioned before, many a hunter has gone into the woods, only to push deer ahead of him to other hunters smart enough to be waiting at the crossings. Boiled down, to a great extent this is the character of a



**SMALL WOODLOT** should never be overlooked as a bet for deer, even if it is isolated. This is especially true in Pennsylvania where many fine deer are being harvested from the agricultural areas. Spot the watchers at strategic points around the woodlot, making sure everyone is aware of the other watchers' whereabouts (for safety purposes). Then one man can enter the woodlot and scour it for deer. In this situation, don't be surprised if, in nice weather, the deer are lying in open fields, a few bounds from the edge of the woodlot.

great amount of eastern deer hunting. The patient hunters standing pitted against those who will get cold or impatient first. Then Mr. Impatient will put the deer into the known travel routes and crossings where Mr. Patient will collect if he can shoot. And—sometimes, as we have seen—it also pays off for Mr. Impatient—particularly when everyone is sitting on his hands and apparently intend to stay that way.

Some advice when you are the driver. Ordinarily, a deer—whether he has “thought about it” or not—seems to know where he is going in the woods when left undisturbed. Shooting at him, or driving him in a way that frightens him, may upset the pattern and he will go in different ways. Generally speaking, however, he will, when possible, end up in the same place (with a kind of cow-like

stubbornness) he intended to get to, even though disturbances have made it necessary for him to detour.

The most successful drives, of course, are those which put deer on the trails they'd normally travel. Hunting an area year after year will impart this knowledge to a fellow if he keeps his eyes open. There is a kind of “wanderlust” in every hunter and he often gets a hankering to hunt new territories each year. This is fun. But the man who hunts the same area for a lifetime gets as much thrill, probably, from his sure and certain knowledge of the area and the habits of its deer herd.

At any rate, in summing up, whether in new or familiar surroundings, study the possibility of the one-man drive whenever hunting in small groups. As Mose proved:

“One man CAN do it!”





# FIELD NOTES



## Accidents Are Caused

**BUTLER COUNTY**—With the hunting season now in full swing I have had the unfortunate task of investigating a fatal hunting accident. It involved a man hunting without trigger guards on a shotgun. This is the second accident, both fatal, that I checked that was due to the same cause. Even though the hunter is familiar with his gun, to hunt with it in a damaged condition is just asking for trouble. I hope that the Hunter Safety courses now going on all over the State will prevent these careless accidents. Let's not send out children to these classes, **TAKE THEM.**—Paul R. Miller, District Game Protector, Butler.

## Furrow Pheasants

**CRAWFORD COUNTY**—While Deputy Wm. Kroski was working in his garden he heard a movement behind him. Following him down the row were several pheasants. They were feeding on earth worms and dusting in the freshly turned earth. He went into the house to get his camera and when he returned the pheasants were still waiting for him to dig up more food for them.—John R. Miller, District Game Protector, Titusville.

## Short Circuit

**MERCER COUNTY**—A great Blue Heron's radar evidently was not working properly on September 18, as it hit the 12,000 volt line at 3:00 A.M. and also knocked out a 4,160 volt line of Penn Power Co. near Greenville where the line crosses the river, affecting nearly 2,000 customers.—Arden D. Fichtner, District Game Protector, Greenville.

## Dove Spinning

**COLUMBIA COUNTY**—Dove hunting has become a very popular sport and is one sport that will really tax the hunters skill. Take for instance this hunter who on the first day of the season picked out a good stand over a one acre farm pond where the birds came to water. He shot down six birds in a row, but could find only two in the very high weeds surrounding the pond. Becoming disgusted at the waste down over the water, and by using stones he could shove them in to shore by the action of the waves. This he did on the second day, but soon ran out of available stones. On the third day this person returned with a spinning rod and jitterbug lure. After the bird fell into the water he would pick-up the rod and cast out over the bird, retrieve until the lure caught on the bird and then bring it in. Needless to say he lost no more doves since he could easily see where they landed.—William E. Fulmer, Land Manager, Bloomsburg.

*FISHING LICENSE? BUT  
I TELL YOU - I'M HUNTING!!*





### Hawk Decoys

CLEARFIELD COUNTY—Recently Deputy Game Protector Kruise, told me of an interesting occurrence in his neighborhood.

It seems that one of his neighbors has a few plaster of paris statues of ducks in his back yard that a passing Cooper's Hawk noticed. The hawk made about four or five passes at the statues before he gave up. The "ducks" were probably the bravest ones the hawk had ever met.—John B. Hancock, District Game Protector, Irvona.

### Aerial Combat

SOMERSET COUNTY—Recently while stocking pheasants in Greenville Twp., I witnessed quite an aerial "dogfight" between three marsh hawks and a newly "liberated" cock pheasant. The cock, which was quite a "flier" for his breed, took off from the crate and was flying high over an old grass field when three marsh hawks came out of nowhere and proceeded to attack him. Mr. Pheasant really turned on all power and dodged his attackers until he reached cover of a nearby wood where the hawks continued to hover over his perch for about 15 minutes. According to the Natural History books the marsh hawk feeds chiefly on rodents but these "gentlemen" seemed to have acquired a sudden taste for fresh pheasant in the air.—E. F. Utech, District Game Protector, Confluence.

### Coal Mining Copperhead

INDIANA COUNTY—The following was related to me by Deputy Andrews of McIntyre. He received a call to check a snake that had been killed and found that it was a Copperhead. The odd part was, this snake was discovered about 1/2 mile inside the Kent No. 8 mine, lying on the frame work between the conveyor belts that transport the coal from inside the mine to the tippie. This is a "drift" type of mine. At times this belt is reversed, and the snake may have gotten on the belt and "rode" inside. Was the snake taking up mining?—A. J. Zaycosky, District Game Protector, Indiana.

### Bird Watcher

BUCKS COUNTY—On a recent Sunday, we were called out to pick-up an accidentally killed deer in New Hope, RD. While there, one of the local gentlemen introduced himself and a conversation about wildlife, in general, ensued. While we were talking, a large cat appeared and stalked around the hedges and shrubs in a menacing manner.

Our new acquaintance told us that the cat is named Sylvester and he is a bird watcher by trade. It seems he took up this comparatively safe occupation since the early spring day when, in an attempt to pounce upon a ringneck hen, he was thoroughly trounced by a cock pheasant that he had failed to observe lurking nearby.—William Lockett, District Game Protector, Doylestown.

*This is as close  
as I get!!*





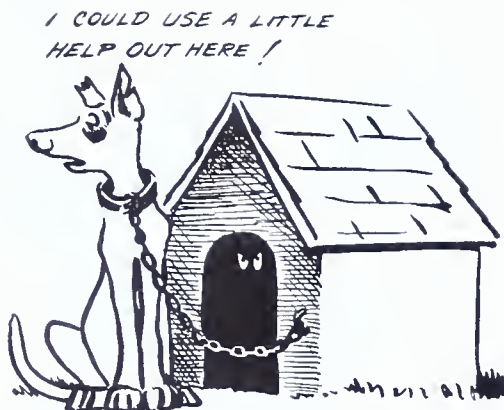
## Twenty Dollars Per Pound

**FRANKLIN COUNTY**—There has been more interest in dove hunting this year than ever. There has been an excellent supply of doves and many a hunter has had his opinion of his wing shooting ability revised. 2 boxes of shells for 2 doves is pretty common. The price of dove meat generally is running about \$20.00 per pound.—Edward W. Campbell, District Game Protector, Fort Loudon.

## Good Investment

**JUNIATA COUNTY**—As a result of Mr. Paul Failor's recent talk on predator control at the Blue Rock Sportsmen's Club in Mifflin County, one of my deputies, Charles Leiter of Mifflintown, got a touch of the trapping bug. He had never trapped for fox before and I showed him how, exactly as is shown in the Game Commission book on Predator Control. I gave him a bottle of lure and some red fox urine, he rounded up an old peach basket, gloves, trowel, hatchet, screen and went to work.

He chose an area within one-half mile of his home. Within four days after setting his first trap, Charlie had 3 nice red fox hides hanging up and was sold on trapping fox. Another Deputy, Carl Dressler, also of Mifflintown, also had never trapped fox, worked with Leiter and some of Leiter's enthusiasm must have rubbed off because the following week he asked for and received a similar demonstration. It took him a little longer but within one week he had three hides to bounty, among them a 3-legged fox. This speaks very highly for the book on predator control and for these fellows brought back a handsome return for the twenty-five cents they invested.—Robert P. Shaffer, District Game Protector, Mifflintown.

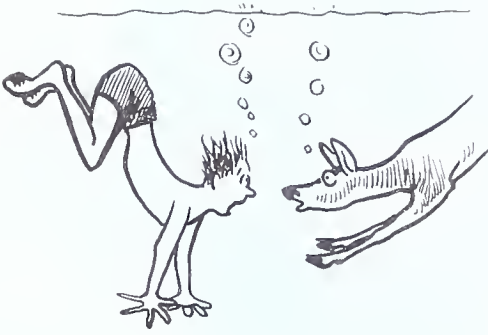


## In the Doghouse

**MERCER COUNTY**—This story was related to me by Rudy DeAugustine, who operates a restaurant on the Mercer-Grove City road. Rudy has a large German Police dog chained at the rear of the restaurant to guard the building, and on the evening of September 15, 1959 he was working in the restaurant and heard the dog kicking a commotion. He went out to investigate and learned then that the dog was outside of his box and barking madly at a large buck coon that had taken over the dog box. With a little help from Rudy the dog finally got the better of the coon and had the dog box all to himself again.—Arthur T. Biondi, District Game Protector, Mercer.

## Spotlight Surprise

**FRANKLIN COUNTY**—While on patrol recently for jacklighting in Franklin County with Fish Warden Gouba we sat watching a field when a light came on over the other side of the field and remained on for several minutes; then there was another light followed by a shot and then both lights went out. Upon investigation of the shooting we found that there was a cabin full of campers. One of the women had gone outside and had found a large snake in the outhouse. One of the men came to her rescue, killed the snake with a revolver.—Edward T. Clark, District Game Protector, Chambersburg.



### Tank Act

**SUSQUEHANNA COUNTY**—Old timers say last summer was the hottest in many a year, good corn raising weather but hard on wild animals. Seems there was just nothing a deer could do to escape the extreme heat and accompanying clouds of insects. However John Parks of Hickory Grove thinks there are two deer living on his farm that have solved the heat discomfort problem. Earlier in the summer Mr. Parkes found a deer swimming in his pool located in the front yard. The deer could hook its front feet over the edge but was unable to draw itself out. Mr. Parks rescued this one with a rope, writing the incident off as an accident. But when a second appeared in the pool a short time later he decided maybe there was reason in their madness that perhaps these deer had found a good thing and knew it.—Donald G. Day, District Game Protector, Susquehanna.

### Calling Card

**INDIANA COUNTY**—While patrolling one of the State Game Lands in Indiana County on September 11, 1959, at 11:30 a.m., I noticed a gray fox hunting across one of the food plots. By the time I got my gun and shells ready, the first fox had disappeared, but at the moment another fox came across the food plot and the two foxes ran into a nearby edge cutting. Walking down to the edge,

I could see the one fox walking up a fallen down tree. After two shots and much crashing around in the edge cutting, I reached down to pick up my fox and as I did so, my crow call fell from my pocket, dangling on the string. I grabbed my crow call and sounded a 5 call distress call, and out of the brush, not more than 40 feet away, popped the other fox and I had my second fox for the day. This is the first time that I have ever seen fox, hunting at this hour of the day in early September and coming into a crow call after so much disturbance.—J. A. Badger, District Game Protector, Indiana.

### One Man Bird

**CLARION COUNTY**—The following was related to me by Ralph Dietz, a very active local sportsman. Ralph carries on a browse cutting program behind his home and three years ago a young grouse became friendly with him in the area of cutting. Ralph began feeding the bird and eventually it would come to his call and even follow him around as he worked. Today, three years later, the grouse having escaped predators, disease and the hunter's gun still comes to be fed at Ralph's call. Strangely, in spite of the bird's friendliness to Ralph, it will not come near other members of the human race.—David C. Kirkland, District Game Protector, Clarion.







## Say -- A-a-a-a-h

By John Guilday

**T**HE clinking of bottles at five o'clock in the morning is perhaps the one sound we most readily associate with milk. But there is yet another. Despite this modern era, when even the cows must submit to automation in all of its awesome glory, the old squirt-squirt in the milk pail is a sound remembered fondly by many of us, a sound as nostalgic as that of the long, night whistle of a steam locomotive.

If you can remember that old squirt-squirt then you don't have to be told how many front teeth a cow has in her upper jaw. But how about a deer?

If you're looking for a sure bet, here's a good one. You just sit on him hard there and we'll look. Not a tooth! He's as gummy as an anteater up front. Freak? Well then, get off that deer and pick another one, any age, either sex. Reason? The old model was just discontinued millions of years ago in the formative stages of deer evolution.

As a matter of fact, nothing that "divideth the hoof" has upper front

teeth be it deer, elk, moose, buffalo, cow, antelope, sheep, goat, chamois, or even the giraffe for goodness sake. Pigs do and so do camels, but then you never know what to expect from a camel these days.

This is not the handicap it appears to be. As we have seen, it's rather the rule than the exception among hoofed animals. It's also a rather ingenious mechanism for cropping vegetation with a minimum of wear and tear on the choppers.

An animal that eats grass and the like has to put up with a terrific amount of wear on his teeth, sand in the spinach so to speak. As a result its teeth wear down very rapidly. Now, by eliminating the upper front teeth, and substituting a soft but tough pad of gristle and skin for the lower teeth to bite against, there's just that much less wear on the lower teeth. And when its teeth wear out, the animal is finished. A deer or a cow, then, does not bite off a blade of grass the way a horse does. They tear it off with a slight toss of the head. Even so, in 10 years time the

lower front teeth of a deer are reduced to simple pegs, each tooth worn down to its roots. As usual, the dairy folks who now have available such things as mattresses for cows, piped in music, and even brassieres for their charges, have met this challenge to bovine longevity with the enthusiasm of an adman launching a campaign against filter feedback. There is now available (better jot this down) a set of metal caps for the front teeth of elderly cows, real store-bought ones.

Horses, of course, do have front teeth in each jaw, big "horsey" ones. But the horse tribe, which takes in asses, donkeys, onagers, kiangs and

zebras (in case of crossword puzzle, break glass) have followed their own evolutionary path down through the ages. Faced with the same problem, that of excessive abrasion and rapid toothwear, they solved it, or rather came to a compromise with nature, by elongating each tooth, and increasing the amount of hard resistant enamel by infolding.

But we're talking about deer. Just for curiosity's sake, next time you get a chance, make a couple of bets on it and see just how observant a fellow the average deer hunter is. You're pretty good eh? Well now—how many joints in your little toe? Ya sure?

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## AN ELK HARDLY RESEMBLES A DEER

Every year or two an elk is killed in Cameron, Forest or Elk County, Pennsylvania by a deer hunter. The great size of a mature bull elk, plus the fact his antlers arch to the rear, not forward as do the buck deer's, have not always ensured the safety of the magnificent animal. And the ungainly-looking, full grown cow elk, whose height and bovine-like head should indicate to the most fertile imagination she is no 80-pound doe deer, has also been "mistaken," somehow, for a legal white-tail.

In past, after one of these protected animals has been slain it has been learned from the law breaker, or reasonably concluded, that an excited or inexperienced gunner, or one of those individuals who kills for the love of killing, pulled the trigger. Hunters who have scruples about reporting the average Game Law violator feel no compunction about turning in a person who shoots an elk in Pennsylvania.

There has been no season on elk in the Commonwealth in many years, and there is none this year. The penalty for shooting one of these animals is \$200 and, in the discretion of the court, six months imprisonment. In the interest of all-around safety, the Game Commission recommends: When in the locality where the small herd of elk barely holds its own (anywhere in Pennsylvania for that matter) have fun and bag a deer in season if you can. But before firing make sure your target is wild and legal—not a protected animal or a brown-clad human. A mistake shooting cannot be undone. It may take human life or, bad enough, it can prove costly as "pocketbook education."





# CONSERVATION NEWS



## Live Trapping No Answer to Curbing Deer Nuisance

An excellent illustration of the inefficiency of live trapping for deer reduction is the Army's 10,000-acre Seneca Ordnance Depot in central New York. Acquired in 1942 for the storing of munitions and other explosives, the depot was encircled with a seven-foot fence and the deer population began to expand under protection and as animals on the outside jumped the fence to enjoy the comforts of military life. By 1953, the deer numbered about 1,000 and were interfering with the normal operation of the depot.

It was then that the Army turned to the State Conservation Department for advice in controlling the deer. Hunting was out of the question. Although a misplaced shot would have settled the deer situation, it also would have solved the earthly problems for the many humans living outside the munitions depot. Driving the animals through pre-cut holes in the fence was impractical and unacceptable. Crop depredations outside the reservation already were extensive.

Using 12 live traps for a total of 66 days during the winter of 1954-55, four Army men succeeded in capturing 69 deer. Better weather conditions the following winter enabled the men to take 249 deer. During the two-year period that the live trapping operations removed 318 deer, biologists estimate that about 800 fawns were born to does on the depot. For each deer removed from the reservation about  $2\frac{1}{2}$  deer took its place excluding, of course, the animals that decided to join or desert the Army by leaping the seven-foot boundary fence.

## Britt Named Chief of Propagation Division



Ralph E. Britt, of Harrisburg, has been named Chief, Division of Propagation by the Pennsylvania Game Commission. The new staff officer replaces Earl S. Greenwood, who retired last summer after a long career with the Commission. Britt had been assistant chief of the division.

A native of Smithfield, Pennsylvania, Britt graduated from Pennsylvania State University and received a master's degree from Rutgers University in poultry husbandry. He is a former employee of the Pennsylvania Department of Agriculture and started his service with the Game Commission in March, 1945. He is a past president of the American Pheasant Society, a director of the North American Game Breeders Association, and is secretary and a director of the Pennsylvania Game Breeders Association. Mr. Britt is married and has two daughters.

## Pennsylvania Ranks Second In '58 Sale of Duck Stamps

The U. S. Fish and Wildlife Service recently announced the Migratory Bird Hunting Stamp sales during the federal fiscal year ending June 30, 1959.

Within that 12-month period a total of 2,165,562 of the "duck" stamps were sold in United States Post Offices. By flyways the sale was: Atlantic, 325,817; Mississippi, 931,544; Central, 501,672; and Pacific, 396,809. Also, 9,720 were sold to stamp collectors.

Of the Atlantic Flyway States 40,604 Pennsylvania waterfowl hunters bought the stamp during the last federal year. Surprisingly, having few lakes and not bordering the Atlantic Ocean, the Keystone State hunters ranked second in purchases among the 18 states and Puerto Rico in the flyway. New York was first with 66,700. Florida was third with 35,934.

## Excellent Duck Book in Print Again

"The Canvasback on a Prairie Marsh" once again is available to all persons who are interested in ducks and in birds generally, according to the Wildlife Management Institute. Sold out since 1950, the excellent book by H. Albert Hochbaum, is a pioneering report on the habits and actions of waterfowl—particularly canvasbacks—on their Canadian breeding and nesting grounds. This second edition contains a new chapter of appended notes to bring the reader up to date on new developments in waterfowl biology and additional reading references.

"The Canvasback on a Prairie Marsh" is available from The Stackpole Company, Telegraph Press Building, Harrisburg, Pennsylvania, at \$4.50 a copy.

## Governor Issues Plea To Save Diving Ducks

Governor David L. Lawrence endorses the concern of the Pennsylvania Game Commission over the present duck situation. Other governors and wildlife agencies are also disturbed. Of particular concern are three kinds of ducks—the canvasback, redhead and ruddy. The population of "divers," which nest over water, has fallen dangerously low as the result of successive droughts in the prairie Provinces of Canada, their principal breeding grounds.

Governor Lawrence joins with the Game Commission and the U. S. Fish and Wildlife Service in recommending: 1. Learn the identifying marks of the canvasback, redhead and ruddy. 2. Don't shoot until the incoming duck is close enough to see its eyes. 3. If the bird is one of the mentioned three, hold your fire in the interest of future duck hunting. If it is another kind of duck it will then be close enough for a clean kill; the bird will not be crippled, perhaps to escape and be wasted.

Remembering the following head markings will help hunters to identify the critical species at close range:

**Canvasback:** Drake: red head, black bill. Hen: brown head, black bill.

**Redhead.** Drake: red head, bluish bill with white ring. Hen: brown head, bluish bill with white ring.

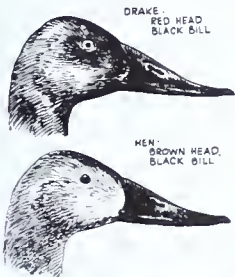
**Ruddy.** Drake: Black top, white cheek and blue bill. Hen: black top, mottled cheek and gray bill.

Hunters this season will play an important role in determining the future of these diving ducks. There is a way, too, that everyone interested in wild waterfowl can help. Buying a duck stamp (at a post office) will help save habitat needed by waterfowl. Under law all of the duck stamp money is earmarked for federal acquisition of wetlands for waterfowl.



# IDENTIFY YOUR DUCKS.

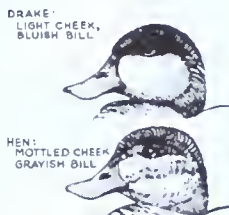
## CANVASBACKS



## REDHEADS

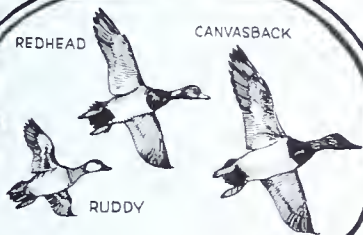


## RUDDYS



REDHEAD

CANVASBACK



RUDDY

*These Ducks  
NEED HELP*



DO NOT CONFUSE  
WITH SCAUP



SCAUP HAVE A  
WHITE SPECULUM



UNFAVORABLE CONDITIONS IN  
NORTHERN NESTING GROUNDS  
HAVE CUT THIS FALL'S DUCK  
SUPPLY. IN MOST SERIOUS  
TROUBLE ARE THE THREE  
SPECIES SHOWN HERE.

### Gunners:

LET THE DUCKS COME IN  
CLOSE UNTIL YOU CAN IDENT-  
IFY THEM, THEN, IF POSSIBLE,  
AVOID SHOOTING REDHEADS,  
"CANS," AND RUDDYS.  
CHECK YOUR DUCK HUNTING  
REGULATIONS.

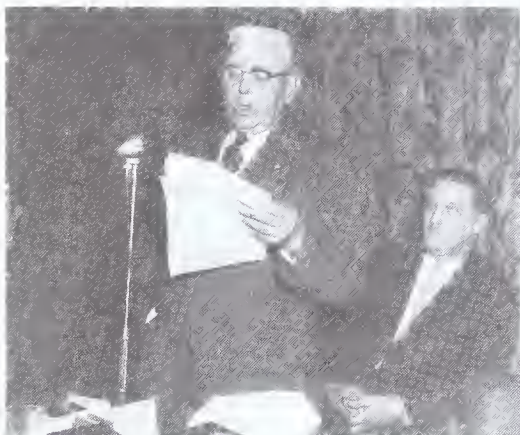


U.S. DEPARTMENT OF THE INTERIOR — FISH AND WILDLIFE SERVICE

## CORRECTION

In the article, "Pennsylvania Deer Story—1959," which appeared in our November issue, an error was made in reporting the number of adult males which had shed their antlers and were examined as antlerless deer. The text figure, through a typographical error, was given as 39%. IT SHOULD HAVE BEEN only 3% (as listed in the table following the text copy).

## Game Protector Les Haney Retires From PGC Service



Game Protector Lester J. Haney, who retired from Commission service on October 1 after 31 years of service, was tendered a fine testimonial dinner in Brookville on October 21. The event was sponsored by the Jefferson County Federation of Sportsmen's Clubs and the Commission's Northwest Division. Principal address was delivered by Maurice Sherman, former Field Division Supervisor and a long-time friend of Haney. There were many notables among the 200 persons at the dinner.

## Archer Struck by Another's Arrow

It had to happen some time. . . .

Since 1951, the first year the archers enjoyed a separate deer season, the Game Commission has received no report of an archer being struck by an arrow loosed from another hunter's bow. But on October 24, while hunting deer in Carbon County, an archer from Lansdale was injured by an arrow shot from the bow of a man from Conshohocken. A nearby doctor closed the wound with several stitches, and the injured man returned home the same day.

Considering the tens of thousands of bow and arrow hunters who now go afield for deer in Pennsylvania—many of them in camouflage apparel—the safety record of the Indian-style hunters still is exceptional.

## Proper Handling Keeps Venison in Prime Condition

Tasty venison—the end product of a successful deer hunt—may be relished long after the season has closed if the kill is properly handled. Recommended steps to take are the following:

Immediately after the deer is killed, carefully remove the entrails. Then wipe the body cavity dry of blood using a clean cloth. Prop the cavity open to allow complete cooling. Venison ages best, after the heat has left the carcass, when allowed to hang, hide removed, in 35 to 40 degree temperature for a week or two days.

In warm weather it is a shameful waste to allow a deer carcass to hang with jacket on it, at camp or rooming place. The proud hunter who wishes to show his trophy to his family and friends should transport his prize in a propped-open auto trunk, on the floor of a station wagon with windows open or on top of a vehicle. In any case the carcass should be propped open to allow free circulation of air in the body cavity. The best way to ensure tasty meat later is to remove the hide, quarter the animal and wrap the quarters in clean cloth soon after the kill—either at camp or at home. Next, to a cooler, locker place or a deep freeze.

As indicated on one portion of the hunting license: Immediately after the entrails are removed, but not later than one hour after killing, cut out and attach to the deer the tag provided. Tagging must be done before transporting or removing the animal from the place it was killed. Using the next section found with the license, answer all the questions and mail the addressed card promptly, postage free, to the Game Commission at Harrisburg. If the original card has been lost, or used in reporting a bear kill, the same information it contains is to be carried on a post card and mailed to the Commission.



## Industry Seeks Hunter Support in Deer Harvest

Forest industries of Pennsylvania, concerned about the effect of deer browsing on future timber supplies, are seeking hunters' support for a greater annual harvest of the state's huge deer herd.

The Pennsylvania Forest Industries Committee, representing the commonwealth's major wood-dependent industries, has issued a pictorial booklet, "Know the Signs of Overbrowsing," which describes the damaging effect of overbrowsing on both deer and forests. The aim of the booklet is to enable hunters to recognize overbrowsing damage, according to A. L. Bennett of Johnsonburg, chairman of the wildlife and recreation subcommittee of the PFIC.

The booklet points out that timber harvesting and deer hunting go hand in hand, but adds that an "inade-

quate harvest of either deer or timber harms both." Timber harvesting is necessary to maintain deer population because new young growth following cutting provides the best deer food. Adequate deer harvests are necessary to prevent overbrowsing from eliminating forest growth.

The booklet shows areas of Penn's Woods where trees have been virtually eliminated due to overbrowsing following a cutting operation. Also shown is the contrast in growth between an area protected from overbrowsing and an unprotected area. The effect of overbrowsing and consequent shortage of food is shown in the contrast in antler development between a deer given full rations and one given half rations in a nutrition study at Pennsylvania State University.

Copies of the booklet may be obtained free of charge from the PFIC, 321 Dauphin Bldg., Harrisburg, Pa.



**HUNTER SAFETY COURSE** was recently given to these 22 boys from the Shippensburg area. The course was sponsored by the Shippensburg Jaycees and conducted at the local high school. Instructors included Walter Snoke, Merle Mathna, Amos Devor, Arthur Coleman, Herb Beckenbaugh, Ross Peterson, Harper Coleman and Frank Lerew. This is the second group to be qualified by this group of NRA-Game Commission certified instructors.



# Hunting Season Climax

By Jim Varner

**D**EER hunting is an age old sport handed down from primitive man who had to match his wits with an elusive four hoofed animal that furnished health sustaining protein for his very existence. When this lowly skin-clad provider's wife reminded him the larder was about empty and something had to be done about it, he did not have a trusty old 'thuty-thuty' with which he could easily clobber said white-tail across the creek 150 yards away. Metals were not known then and our hero, or hen-pecked, ape-like individual as the case might have been, had to resort to stealth with a crude sling-

shot, bow-and-arrow, spear, snare or dead-falls and pits along game trails to occasionally bag one. If he was successful, he deserved some sore of a hand painted shillalah if such cudgels were in style then. More often he had to be satisfied with a mud-turtle or porcupine. So you can see early man's deer hunting would not exactly qualify as a sport. It was an attempt at survival in its crudest sense.

Today's hunting is a far-cry from the sketch pictured above, and we will not tire our readers with the steady progress or evolution of the hunt from the cave-man down to the firearm era. One man's imagination is as good as the other pertaining to what took place. We do know that the nimrod of 1959 is able to enjoy "The Sport Of Kings" (the deer hunt) in Penn's Woods with less handicaps and an abundance of deer never





thought possible even back in 1900. He can tote the most efficient long range firearms ever made equipped with optical sights not even dreamed of 60 or so years ago. Wise game laws rigidly enforced have brought about this favorable situation combined with a far-sighted program of purchasing thousands of acres of recreational areas which fit right into the modern trend. Let us not forget this and not take too much for granted. From some 200,000 taking out licenses a few years ago Pennsylvania will issue near one million licenses this year. All can have pleasant days afield where an estimated herd of deer reaches probably 400,000 animals. What other heavily populated industrial State can boast a similar record?

The hunter who seriously pursues the whitetail for sport knows he is a sagacious resourceful animal. Given anywhere an even break, most of the older bucks which have survived two seasons or more of dangerous living will easily outwit the average hunter. Even where the odds are stacked against him in areas over run with hunters, he will often escape. From a standpoint of safety I do my best to avoid heavy concentrations of hunters. If you do hunt in such places, wear the most conspicuous clothing and dig deeply into your bag of tricks on safety.

Considering our near one million hunters, shooting fatalities are small. All of them were caused and had no reason to happen. With just ordinary care they can be avoided. We are out as sportsmen. A deer is our sport and if you have to pass one up today, what's the difference. Perhaps a better one will be seen tomorrow. Regardless of whether a fellow sees any, it's not worth taking a chance. Help your local N.R.A. Clubs, schools, Game Protectors and private clubs run Hunter Safety Courses. Thru continuous pounding we are able to educate and cut down accidents that

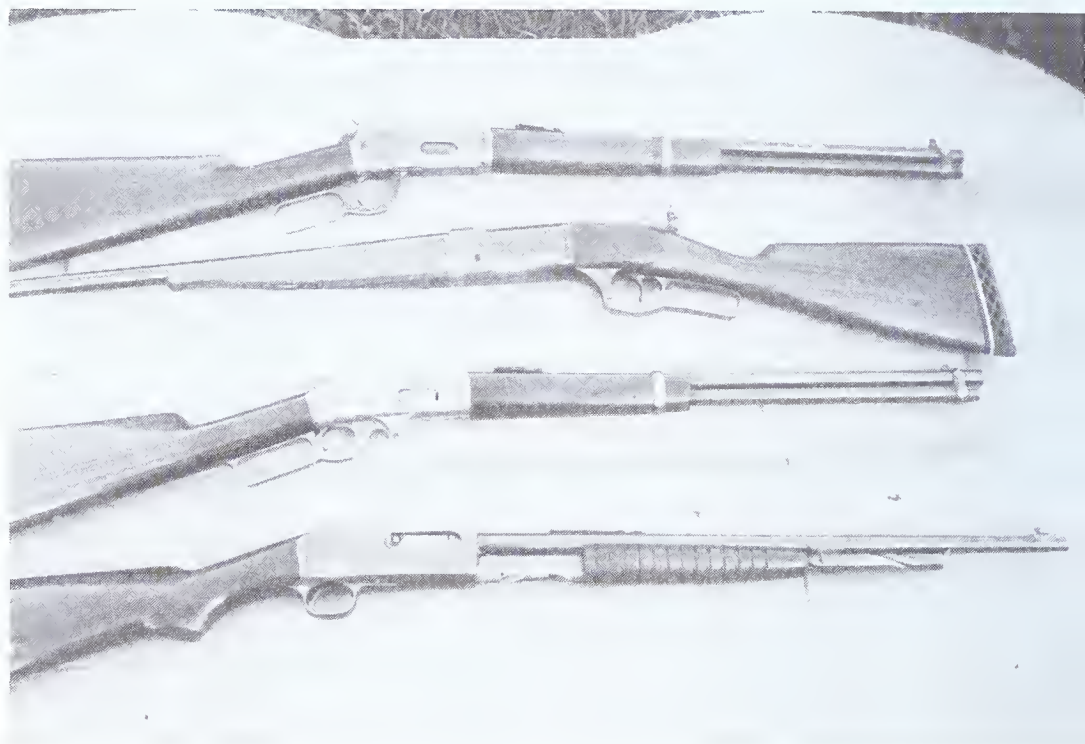
may mean death and intense grief. There is danger in everything you do if the effort is a worthwhile one, but by being alert we can cut it to a large degree. Our firearms are instruments of pleasure and recreation. Understanding them can be invaluable in time of unexpected world strife. Like the automobile in the hands of a fool, they can become dangerous. A good driver or a careful shooter seldom causes an accident. Careful methodical training helps one enjoy more fully any form of recreation whether it is shuffle-board or automobile racing.

To you older members, I am going to warn not to overdo during the hunt. Over-exertion and cold weather puts a severe strain on the heart and can cause trouble. I personally found this out during the 1958 bear and deer season and paid for my negligence. I found out at 68 I was unable to go as strong as I did even five years ago. Take it easy.

In previous articles I have stressed the importance of careful preparation for the hunt. Good clothing is a must. Most of you have a preference as to which is best. When the body temperature falls due to exposure and you are chilled and miserable, your sport becomes a disagreeable task instead of pleasure. Older hunters have their set opinions as to which is the most practical and exposure proof type of clothing. Most of these experienced hunters will be glad to help the beginner. Next to the proper clothes and food comes the firearm you prefer. Don't expect to get the utmost out of any firearm unless you become acquainted with it.

You may be one of those who borrows a friend's rifle or shotgun and are lucky enough to bag a game animal the first morning. I call this 'pot-luck' and doubt whether the hunt means much to such an individual. That fickle old 'lady luck' really smiled upon you.

On the other extreme you may be



POPULAR DEER RIFLES of 40 to 60 years ago included, top to bottom: 30/30 Model 1894 Winchester carbine; 303 Savage Model 1899; 38/55 Marlin 1893 carbine; and 35 cal Remington Model 14. Note that the group includes three lever type firearms and one slide action type.

one of those perfectionists who has sought the utmost in accuracy for a fine 243, 257, 270 or 30/06 the year around on crows, woodchucks and targets, said rifle being equipped with the best of variable powered scope.

Somewhere in between we have the masses who do try to find time to target in their rifle so they can reasonably expect to get their deer within a distance where they can at least feel sure it's the animal they are hunting for. Most of these fellows have killed deer after deer down thru the years with their old Marlin, Winchester and Savage in the more popular calibers like 30/30, 32 Special, 303 and 300 Savage as well as the older 32/40's, 38/55's and let us not forget the well known trombone action Remington 35. Many of you older shooters remember when the 38/55 was the most popular arm of the Maine and Adirondack deer hunters. Before the 32/40 and 38/55,

the 45/70, 45/90, 40/65 and even the 50/110 were popular to name a few. Quite a few deer hunters still use them. They have a high trajectory beyond 100 yards but most of these old-timers are experts at judging distance and really have no handicap. Two different deer were killed last season by a 45/70 and a 45/90 out of my collection by two friends who wished to try them for performance. Both reported instantaneous kills. One said the one he shot collapsed in the middle of its leap. You cannot do any better with a 375 H. & H. Winchester.

There's a certain glamour about these big old black powder rifles that endears them to the hearts of all lovers of firearms. Recently I have been receiving so many inquiries about a session on them we will have to all go into a huddle and discuss them.

I take it for granted most of our readers have carefully checked their



rifle on targets up to at least 100 yards range. If you sighted in with 150 grain bullets, don't change to 180 or 220's and expect the same point of impact at any range unless you happen to have an out of the ordinary rifle. Start your hunt with one brand of ammo and one weight bullet (if you are carefully sighted in for that cartridge) and stick to it thru the season. If you are unable to group six inches or better five or ten shots at 100 yards from a sand-bag rest you are either scared to death of you 'pea-shooter's' recoil and have a severe case of the flinches or have a very poor barrel and unsuitable ammunition. I have seen lots of big men flinch like all getout with the little 30/30 Winchester which has only 7 to 8 foot pounds of free recoil. I have seen ladies weighing not over 100 pounds fire a 12 gauge trap load thru a 100 bird match and miss few targets. The 12 gauge trap load has

a free recoil of 24 to 28 foot pounds according to the weight of the arm. It kicks 8 to 10 pounds more than the 30/06 military load fired from a standard Model 70 Winchester. All of our best deer cartridges make heap big noise but are comparatively pleasant on the shoulder.

Last year I found a group of shooters on the rifle range sighting in their shotguns with rifled slugs. They told me they were following my instructions in the November issue of the GAME NEWS. They must have done a haphazard job of reading the article. Instead of using a solid sand-bag rest and firing carefully each group at 40 or 50 yards, they were shooting at a four foot square piece of cardboard offhand at 35 yards and were flinching so wildly one could have tossed an ash can thru the pattern of huge holes made by the slugs. Many missed the four foot square. They wasted some forty high



MODERN VERSIONS of the deer rifles used 50 years ago, with a new one included, from top to bottom: Winchester Model 94 in 30/30 caliber (still tops them all in popularity); the Model 88 Winchester lever rifle with one piece stock (available in the latest calibers—43, 308 and 358); Savage 300 cal.; Marlin 35 cal.; and Remington slide action 270 caliber.

priced rifled slugs and would have condemned all three guns if I hadn't demonstrated the fact all of the shotguns would do 6 inch groups or better at 50 yards.

No deer hunter is handicapped when using the shotgun on deer with our excellent rifled slugs if he will take time to find out where his gun is grouping the shots. Some shotguns group so well they will do justice to mounting a Weaver 1X scope or at least attaching a suitable form of peep sight. It all sums up to the fact it is the man behind the gun that counts.

I have mentioned in previous articles the recoil from rifled slug loads is not as severe as Express and Magnum shot loads in the same gun so it is not going to break your shoulder. It's a tremendous killer and an excellent brush cutter, if one is worried by this brush complex.

Our State affords all types of shooting to the deer hunter. For the close range brush and medium range running shots in thick second growth timber I prefer a short rifle of adequate power equipped with shallow open rear and at least a three thirty-second size front sight in ivory or gold or a large Williams twilight peep for the rear and sighted to center its sights on a 8 inch black bull at 100 yards. The one power Weaver shotgun telescope is a good compromise here for the older fellows whose eyes focus slowly. Its definition is extremely clear and properly adjusted to your eye it eliminates all error. Actually, it is a good one for all shooters who seek no magnification. Its huge field of view (96 feet at 100 yards) makes it as quick to see as the iron sight if you practice enough with it to understand its advantage. I have broken hundreds of clay targets with this outfit on my J. P. Sauer German Drilling, and bagged deer with it when using both the 9:3 X 74 cartridge and 12 gauge rifled slugs.

The smoothbore is at its best with slugs in the thick cover snap shooting. Many states require you to use buck shot loads but thank goodness we don't have to resort to multiple pellet loads. For medium range shooting up to 200 yards a good man would still be in the game with the peep sight and the 1X Weaver scope. The 2½ X and 3X telescopic sights are fast accurate combinations well adapted to shooting quickly in all cover and all conditions beyond 50 yards. The 4X and variable power up to 8X leave little to be desired. One uses them the year around on targets, crows and woodchucks. Beyond 200 yards long range field or mountain to mountain shooting is something else. The inexperienced nimrod will make a spectacular lucky shot now and then with any kind of sights at great distances but over 200 shots are fired this way scoring miss to one shot which anchors the game. Haphazard long range shooting is not good practice as it means ten cripples to one vital hit. Many of you have seen and heard a barrage going on at a deer running the opposite edge of a field or across the canyon between two mountainsides. Most rifles used in such a case are capable of killing the deer if sighted right and used by an expert who can estimate distance and lead on a running object. Kills are few and far between in most of these cases.

Another element enters here at that is being able to know whether the deer is a buck or a doe and a legal one at that. Only the biggest and best antlers are visible beyond 200 yards and it takes a good binocular or 6X to 10X telescopic sight to qualify here. Rifles for this work require well designed sectional dense stream-lined bullets driven at least 2800 foot per second. Some of the best in this class would be 243 Winchester and 244 Remington on the light side, both using 90 to 105 grain bullets. The 257 Remington Robe





**HUNT FROM THE PAST** saw the author and companions breaking camp in northern Wayne County with the season's limit of six bucks, some very fine specimens. This was deer season, 32 years ago.

and the 25-06 Wild-cat are good with 100 to 120 grain slugs 3000 feet per second or above. One of the best is the 270 Winchester using the 130 grain at 3160 F.S. or boat-tailed 150 around 3000. The 280 Remington should also be a good one. The 30 Cal. rifles have some that are hard to beat commencing with the universally used 30/06 and ending with Roy Weatherby's speed demon, the 300 Weatherby Magnum. The fact still remains if a 30 caliber rifle can project a well designed 150 or 180 grain bullet out to 500 or more yards range it is going to be a better killer than a 100 grain 243, or a 120 grain 257, velocity and trajectory being equal.

Take your pick but learn to estimate distance, and know the trajectory of the bullet you will use to at least 500 yards.

Some of you have hunted hard all day. Perhaps we should all retire after putting a couple of good logs on the embers of the old fireplace. The deer rifle subject will have to wait. Sounds like snow is softly sifting against the window. Two of our pals are already in the arms of "morpheus" upstairs in their bunks. What do you say? Let's join them and start counting big phantom bucks instead of sheep as we all enjoy "THE HUNTING SEASON'S CLIMAX."





# The Score Board

By Tom Forbes

The tournament season has ended and the scores have been entered in the record books. New names appear in the top ratings; records are broken, and few are the defending champions who can long maintain their number one position. An outstanding exception is Pennsylvania's Carole Meinhart of Pittsburgh who has taken top honors in the Women's Division of the annual State Target Championship Tournament for the past five years. At Lancaster in August she won for the third time in a row the National Archery Association Annual Tournament. She has been a member of the United States Archery Team, which represents the National Archery Association in International Competition, for the past three years and won the title of Ladies World Champion at Prague, Czechoslovakia in 1957, the first time a team from

the United States competed in the event. In the PSAA record book she holds the Women's record for Single National, Single Columbia Single and Double American Round and High Individual Team Score. Truly an amazing record of which Pennsylvanians can be proud.

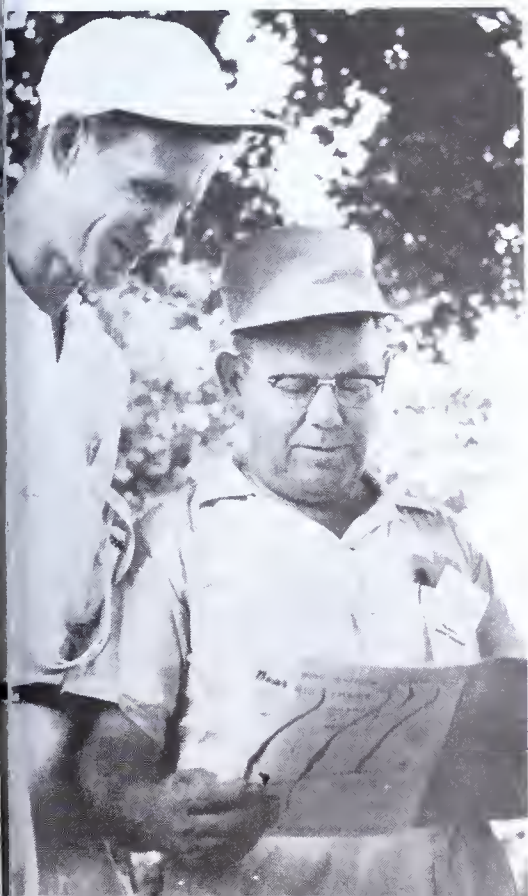
The top of the ladder in Tournament competition is the World Championship which was held in Stockholm, Sweden in August. This marks the third year an American team has participated and the second time the team has won. Pennsylvania was represented by Carole Meinhart of Pittsburgh and Betsy Hibbard of Harrisburg. Clayton B. Shenk, another Pennsylvanian, Chairman of the Board of the National Archery Association served as team captain. "Clayt" as he is known to all Pennsylvania archers is the Executive Secretary and Treasurer of the Pennsylvania State Archery Association and former President of the National Archery Association. When the last arrow was shot and the winning scores went up on the big board,





American men had won five of the first six places and the Ladies three of the first four. James Caspers, Robert Kadlec, James Neeley, Robert Rhode finished in the order named. Caspers, crowned International Champion shot a total of 2247, 44 points ahead of Kadlec who took the number two spot. Robert Cogniaux of Belgium was fifth and O. K. Smathers of the U. S. team placed sixth. Ann Corby of New Jersey was crowned Women's International Champion, Sigrid Johansson of Sweden, the defending Champion was second, Lucille Shine third, and Pennsylvania's Carole Meinhart fourth. Betsy Hibbard the other team member from Pennsylvania finished ninth. Archers from fifteen countries participated in the event.

CLAYT SHENK who conducted the Diamond Jubilee Tournament last summer as president of the National Archery Association looks over the program with Henry Fisher, left, president of the Lancaster Archery Club who served as assistant field captain.



Returning to the United States and ranking first in the number of contestants, the National Field Archery Association's Annual Tournament at Bend, Oregon in August brought out a field of nearly 800 archers. Again Pennsylvania came up with a winner. In the Junior Class of Instinctive Boys Larry Mann of Brockway scored 2704 to lead his nearest opponent by 216 points. In the Men's Free-Style Division James Mackey of Bradford finished second, 19 points behind Robert Kadlec of Rochester, Minnesota who won the men's title. This man Kadlec provides plenty of competition. He was a member of the U. S. Archery Team and he placed second in the Annual Target Tournament of the National Archery Association just three points behind the winner. In the Instinctive Division Carl Heinrich of Richmond, Michigan shot 2799 to take the title. The Free-Style winner, Kadlec shot 2970. In the Women's Division Faye Sconyers of Modesto, California, scored 2182 in the Instinctive Division to win the championship and the Free-Style Title went to Cleo Roberson of Samaria, Michigan with a score of 2621.

Pennsylvania was host to the 75th Diamond Jubilee Tournament of the National Archery Association of the United States at Lancaster, Pennsylvania on August 17-21, 1959. The Lancaster Archery Club was host and the tournament was held on the grounds of Franklin and Marshall College. Twenty-six records were broken and Pennsylvania Archers were well represented when the winning scores were posted. Carole Meinhart of Pittsburgh won the Women's title with a total score of 3732; Betsy Hibbard of Harrisburg was second with 3698. Both ladies are members of the 1959 United States Archery Team. Julia A. Bowers of Lancaster, former P.S.A.A. Ladies Champion finished in 6th place with 3667, Ann Newbold of Lima was 10th, and

Patricia Baier from Oreland 11th. In the men's division the highest scoring Pennsylvanian was Robert H. Kaufhold, Jr. of Neffsville who finished in 16th place. The new champion is Wilbert Vetrovsky from Cleveland, Ohio, who broke two National All-Time records, the Double York 285-1989 and the High Total 3473. Mrs. Robert Leaman from Bird-In-Hand won the 120 yard Ladies Clout, scoring a 268 and the Philadelphia Ladies Team sparked by Betsy Hibbard and including Ann Newbold, Pat Baier, and Peg Moore won the team championship with a total of 2800. In the Men's Sextuple American James Mackey of Bradford was first scoring 4424. Pennsylvania can be proud of the way her sons and daughters performed in National competition.

The Pennsylvania State Archery Association holds two annual State Championship Tournaments. The 25th Open Target Championship Tournament was held at State College on September 5, 6 and 7, 1959. A field of 100 archers competed in the target events. James Mackey won the Men's Target Championship with a total score of 2430. Bob Kaufhold, Jr., was second with 2304. The defending champion, Charles Hein of Pittsburgh placed 25th. Sixty-one archers competed for the title. In the Women's Division Carole Meinhart successfully defended her title scoring the impressive total of 2646. Betsy Hibbard placed second with 2522. Lee Hershner of York took the Junior Boy's title with a score of 1964. Intermediate Boy's Champion is Mike Hershner, brother of Lee, who shot a 2822 for four Junior American Rounds. In the Cadet Class Ronald Meinhart won the title with a score of 1952 for four Junior Columbia Rounds. One more Champion added to the Meinhart family. The Team Championship was won by the Men's Team of the Pittsburgh Archery Club

with a score of 2730. Team members were Carole Meinhart, Robert Albright, Charles Hein, and Robert Meinhart. Lest the reader be confused at finding a Lady on the Men's Team, the rules permit Women to shoot in the Men's Division if they elect. However Men may not shoot in the Women's Division. The winning Women's Team was from Philadelphia Archery Club and Betsy Hibbard, Ann Newbold, Peggy Moore and Cherry Booker ran up a total of 2602 points to take first place. Nine All-Time State records were broken at this tournament: James Mackey the Single York 922, the Single American 766, and the Double American 1508; Carole Meinhart, Single National 580, Single Columbia 611, Single American 736, and Double American 1456; Lee Hershner Double Junior American 1276; Mike Hershner Single Jr. American 736 and Double Junior American 1412.

In the 14th Open Field Championship Tournament of The Pennsylvania State Archery Association held on the Field Course of The Bradford Sportsmen's Club James Mackey extended his winning streak in State competition and won the title in the Free-Style Division with a score of 1476. The Runner-up was Ralph Basinger of Aliquippa, an Instinctive Archer who scored 1427. Former N. F. A. A. Champion Jay Peake of Charleroi placed 11th in a field of 319. In the Women's Division Jane Waite of Tyrone shooting in the Instinctive Division topped a field of 53 competitors to win the Title of Woman's Champion with a total of 1001 points. Evelyn Ingram of Littleton, the runner-up, scored 955. Richard Husted, Jr. was high Junior Boy with 1059 and the Intermediate Boy's Title was won by Larry Martin with a total of 1197. The Field Shooters also broke nine All-Time State Records.





# OUTDOOR FUN WITH A FUTURE



## Make Good Use of Old Christmas Trees

By Ted S. Pettit

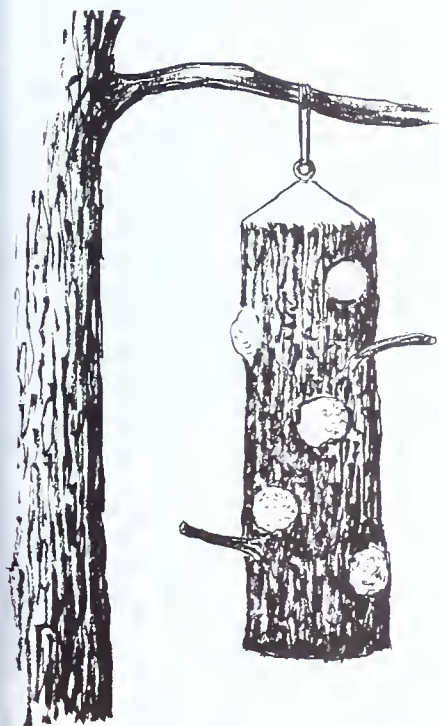
**O**NCE they have fulfilled their original purpose of decorating the home over the holiday season, Christmas trees can be put to good conservation use in several different ways. For it seems a waste to consign to the dump hundreds of thousands of trees that took from eight to ten or more years to grow and which used

up a reasonable quantity of good soil-minerals in the process. So instead of burning or otherwise wasting Christmas trees this year, plan one or more ways of using them in a conservation project.

The first step is to set up a method of collecting trees and storing them safely until they can be used. Use either a personal call or a mimeographed notice. Homes in a definite locality should be notified of the project, with a request to save their tree, which will be collected on a specific day. Then on that day, Boy and Girl Scouts, campfire girls, 4-H members, junior sportsman club members, and other youth group members on foot, can collect trees on a block by block basis and pile them in one spot for pick-up by truck. Sportsman's clubs, civic and service clubs, and youth groups parents usually have among their numbers some people who own trucks and who will use them on a Saturday to pick up trees and take them out into the country where they can be used in conservation projects.

### Brushpiles

Out in the country, along woodland edges or in hedgerows, old Christmas trees may be used in large





“brush” piles. To be most effective, these piles should be eight feet or so high and fifteen or more feet in diameter. But trees should not just be stacked up and left that way.

A sturdy pole in the ground, or a small tree or shrub should be used as a base. The butt end of the larger trees should be nailed or wired to the pole or tree three or four feet above the ground. Then other trees should be wired or tied to the first trees, layer on layer, until the pile reaches the desired size. By doing this, you keep the pile from toppling over in the wind or under heavy snow. And you also provide space underneath where a rabbit can find shelter from weather or enemy.

Brushpiles of this type serve a very useful purpose for many years to come and as time goes on they provide an interesting demonstration of what foods birds prefer.

The needles will have fallen off the Christmas trees by April in all probability. But between January and April those trees provided good shelter for birds and other animals.

But the birds that use the brushpile have been feeding on wild fruits and seeds, then droppings will deposit seeds in around the brushpile. Come summer, and the next fall, the pile of old trees will serve as a perch for more birds and more and more seeds will be brought there.

But the second or third summer

after the brushpile is built—about the time the old trees are rotting away—that site will be an island of weeds, shrubs, and vines. The fruit and seeds of which are preferred bird food. You may find blackberries, raspberries, elderberries, poke, green brier, sumac, poison ivy, wild cherry, sassafras, mulberry, cedar, dogwood and any or all of several other shrubs, vines, or other plants starting to grow. As they grow, they, too, provide food and cover for the same and other animals that used the original brushpile.

### Erosion Control and Preventions

Christmas trees can be used very effectively, too, in helping to control or prevent erosion. On small bare areas along stream banks or stream edges or on open hillside slopes, many of branches can be used to break the force of rain and prevent soil washing down the hill.

Cut branches from as many trees as necessary to make a dense mat three or four inches thick over the exposed soil.

Then drive in stakes six feet apart in rows, with rows six feet apart. Use binder twine or old bale wire to make a criss-cross net between and around the stakes to hold the branches in place against wind and rain.

Small gulleys may be controlled sometimes with old Christmas trees



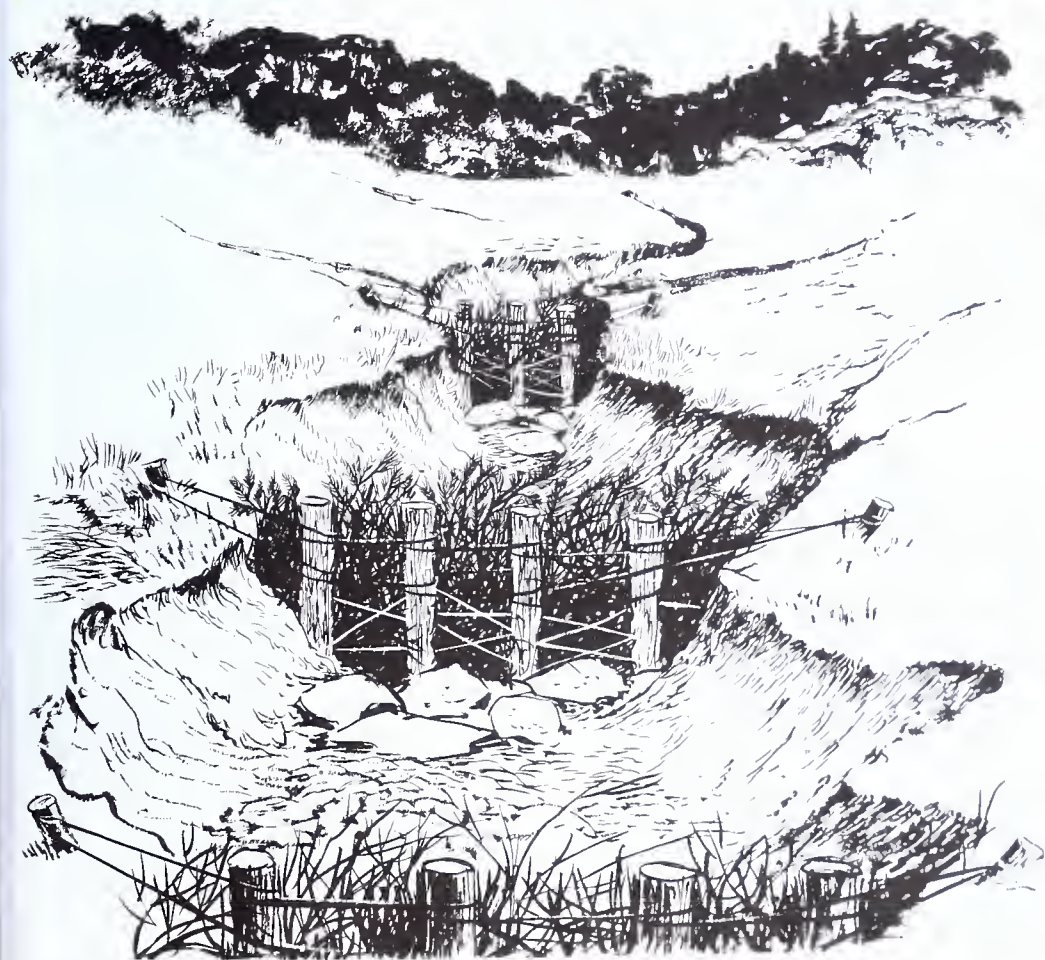
Drive stakes in the bottom of the gulley about six to eight feet apart. Place small trees in the gulley with the butt end up hill, and nail or wire the trunks to the stakes. In most cases the entire gulley should be filled with small trees.

In large gulleys, a more complicated construction job is necessary. Trim branches from large trees, and cut the trunks into stakes five to six feet long. Drive these stakes into the bottom of the gulley to form a fence across the gulley. Then fasten chicken wire across the stakes, or use bale wire to make a wire fence across the gulley. Use the tree branches then and weave them in the fence, to form a dense mat on the up-hill side of the fence, with the thickest part of the mat on the bottom. Place some large rocks or logs at the bottom, so water will not wash under this dam, and be

sure that the dam is tied into the sides of the gulley so that water will not wash around the sides of the dam and perhaps enlarge the whole gulley.

These dams should be placed close together, depending upon the slope, but usually not much more than twice the height of the dam apart. Between these dams, other large trees may be staked and tied to the bottom and sides of the gulley to help break the force of the water. Start gulley control projects such as this at the top or up-hill end of the gulley and work toward the bottom. The source of the problem that causes the gulley is at the top end.

Don't waste Christmas trees this year and in future years. Use them in constructive conservation projects in a way that is really "Outdoor Fun With a Future."



# Pennsylvania Official 1959 Open Seasons and Bag Limits

(Regulations apply for Hunting License Year, September 1, 1959 to August 31, 1960)

Open season includes first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals on October 31 will be 8:00 A. M., EST. On other opening days, and otherwise during the season for upland and big game, the shooting hours daily are from 7:00 A. M. to 5:00 P. M., EST, excepting from July 1 to September 30, inclusive, 6:00 A. M. to 7:30 P. M., EST, and the hours for the October archers' deer season, which are 6:00 A. M., to 5:30 P. M., EST. (FEDERAL REGULATIONS FOR SEASONS, BAG LIMITS AND GENERAL SHOOTING HOURS ON MIGRATORY GAME BIRDS WILL BE ANNOUNCED LATER.)

| UPLAND GAME (Small game possession limits below)                                                 |                                                                                                                                                                                                                                                              | BAG LIMITS                           |          | OPEN SEASONS              |               |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------|---------------------------|---------------|
|                                                                                                  |                                                                                                                                                                                                                                                              | Day                                  | Season   | First Day                 | Last Day      |
| Ruffed Grouse                                                                                    | .....                                                                                                                                                                                                                                                        | 2                                    | ..... 8  | Oct. 31                   | Nov. 28       |
| Wild Turkeys (see below certain counties closed)*                                                | .....                                                                                                                                                                                                                                                        | 1                                    | ..... 1  | Oct. 31                   | Nov. 21       |
| Squirrels, Gray, Black & Fox (combined)                                                          | .....                                                                                                                                                                                                                                                        | 6                                    | ..... 30 | Oct. 31                   | Nov. 28       |
| Ring-necked Pheasants, males only                                                                | .....                                                                                                                                                                                                                                                        | 2                                    | ..... 8  | Oct. 31                   | Nov. 28       |
| Rabbits, Cottontail                                                                              | .....                                                                                                                                                                                                                                                        | 4                                    | ..... 20 | Oct. 31                   | Nov. 28       |
| Rabbits, Cottontail .. (not more than 20 in combined seasons)                                    | .....                                                                                                                                                                                                                                                        |                                      |          | Dec. 26                   | Jan. 2, 1960  |
| Bobwhite Quail                                                                                   | .....                                                                                                                                                                                                                                                        | 4                                    | ..... 12 | Oct. 31                   | Nov. 28       |
| Hares (Snowshoe Rabbits)                                                                         | .....                                                                                                                                                                                                                                                        | 2                                    | ..... 6  | Dec. 26                   | Jan. 2, 1960  |
| Raccoons (hunting or trapping)                                                                   | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | No Close Season           |               |
| Woodchucks (Groundhogs)                                                                          | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | No Close Season           |               |
| Grackles                                                                                         | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | No Close Season           |               |
| Squirrels, Red (closed October 1 to 30, inclusive)                                               | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | All mos. (exc. Oct. 1-30) |               |
| Bears, over one year old, by individual                                                          | .....                                                                                                                                                                                                                                                        | 1                                    | ..... 1  | Nov. 23                   | Nov. 28       |
| Bears, as above, by hunting party of three or more                                               | .....                                                                                                                                                                                                                                                        | 2                                    | ..... 2  | Nov. 23                   | Nov. 28       |
| DEER:                                                                                            | Bow and Arrow Season—Any sex, regardless of size. (Requires Hunting License and Archery License, but no Antlerless Deer License)                                                                                                                             | (only one deer for combined seasons) |          | Oct. 3                    | Oct. 30       |
|                                                                                                  | ANTLERED DEER—Regular Season—Male with two or more points to one antler: Provided, a male deer with an antler three or more inches long without points, measuring from the top of the skull as the deer is in life, shall be considered legal, by individual | 1                                    |          | Nov. 30                   | Dec. 12       |
|                                                                                                  | ANTLERLESS DEER SEASON—(Requires Hunting License and Antlerless Deer License), by individual                                                                                                                                                                 |                                      |          | Dec. 14, 15 and 16        |               |
|                                                                                                  |                                                                                                                                                                                                                                                              |                                      |          |                           |               |
| NO OPEN SEASON—Hungarian Partridges, Hen Pheasants, Sharp-tailed Grouse, Cub Bears, Elk, Otters. |                                                                                                                                                                                                                                                              |                                      |          |                           |               |
| FURBEARERS:                                                                                      |                                                                                                                                                                                                                                                              |                                      |          |                           |               |
| Skunks and Opossums                                                                              | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | No Close Season           |               |
| Minks                                                                                            | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | Nov. 21                   | Jan. 16, 1960 |
| Muskrats (traps only)                                                                            | .....                                                                                                                                                                                                                                                        | Unlimited                            | .....    | Nov. 21                   | Jan. 16, 1960 |
| Muskrats (traps only)                                                                            | .....                                                                                                                                                                                                                                                        | Unlimited                            | AND      | Feb. 13                   | Mar. 19, 1960 |
| Beavers (traps only) state-wide                                                                  | .....                                                                                                                                                                                                                                                        | 5                                    | ..... 5  | Feb. 13                   | Mar. 19, 1960 |

## SPECIAL REGULATIONS

- TURKEYS—COUNTIES CLOSED**—\*Adams, Cumberland, Perry, York and that part of Franklin south and east of U. S. Route 11.
- POSSESSION AND TRANSPORTATION LIMITS** of legally-killed small game shall mean not more than the daily limit for the first day nor more than an accumulated total for each succeeding day of the open season for each species; but not in excess of the season limit, regardless of where held, stored or found in possession.
- DEER**—Even though there are three separate seasons for taking deer, a hunter may not kill more than one deer during the three 1959 seasons, whether hunting individually or with a camp or hunting party. An Archery License is required during Bow and Arrow Season, issued only by County Treasurers at a fee of \$2.15, and the Department of Revenue, Harrisburg, at a fee of \$2.00. Antlerless Deer Licenses are issued only by County Treasurers at a fee of \$1.15, and valid only in the county for which issued. Farm occupants may hunt for deer during the Archery Season, as well as the Antlerless Deer Season, without a license on lands resided upon, or those immediately adjacent with the written consent of the owner or lessee. Under the law, no application for an Antlerless Deer License shall be approved, or license issued, to a nonresident prior to November 14, or after December 13, 1959.
- BEAVERS**—No trapping at Commission-posted dams. Nonresidents may not trap beavers. One person may set, tend or operate 10 traps only. Traps must not be set on the structure of any beaver dam or house, or within 25 feet of the waterline on the structure of either thereof. Tags must be kept above ice or waterline to facilitate identification without disturbing traps. Pelts must be tagged within 10 days after season, and may not be sold or otherwise disposed of until properly tagged. Present them to the Game Protector in District or County where trapped.
- TRAPPING**—Traps for furbearers not to be placed, staked or set before 7:00 A.M. on the first day of open seasons. The season indicated for Trapping closes at 12:00 o'clock Noon on last day. Traps must be tagged with metal name tags.
- SNARES**—The use of snares is prohibited in all counties except by special permit.



# PENNSYLVANIA GAME COMMISSION DIRECTORY

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GLENN L. BOWERS ..... *Deputy Executive Director*  
PAUL J. SAUER ..... *Comptroller*

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THOS. F. BELL ..... *Chief*

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RALPH E. BRITT ..... *Chief*

## FIELD DIVISIONS

SOUTHEAST DIVISION—M. D. Stewart, Supervisor, 1009 N. Elghth St., Reading.  
Phone: Franklin 4-2661

Berks, Bucks, Chester, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Schuylkill, York.

NORTHEAST DIVISION—C. C. Stainbrook, Supervisor, 987 Wyoming Ave., Forty Fort. Phone: Butler 7-6193

Bradford, Carbon, Columbia, Lackawanna, Luzerne, Monroe, Montour, Northumberland, Pike, Sullivan, Susquehanna, Wayne, Wyoming.

NORTHCENTRAL DIVISION—LeRoy Gleason, Supervisor, Avis (R. D. 1, Lock Haven) Phone: PLaza 3-3404

Cameron, Centre, Clearfield, Clinton, Elk, Lycoming, McKean, Potter, Tioga, Union.

SOUTHCENTRAL DIVISION—James A. Brown, Supervisor, 327 Penn St., Huntingdon. Phone: MITchel 3-1831

Adams, Bedford, Blair, Cumberland, Franklin, Fulton, Huntingdon, Juniata, Mifflin, Perry, Snyder.

NORTHWEST DIVISION—T. A. Reynolds, Supervisor, 422 13th St., Franklin. Phone: Idlewood 2-5610

Butler, Clarion, Crawford, Erie, Forest, Jefferson, Lawrence, Mercer, Venango, Warren.

SOUTHWEST DIVISION—G. L. Norris, Supervisor, 339 W. Main St., Ligonier. Phone: BEverly 8-9519

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ROBERT E. LATIMER ..... *Waterfowl Management Agent*

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## GAME FARMS

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WESTERN GAME FARM—Jack N. Anderson, Superintendent, R. D. 1, Cambridge Springs. Phone: 3707

LOYALSOCK GAME FARM—Charles Pfeiffer, Superintendent, R. D. 2, Montoursville. Phone: Loyalsock 5-2500

STATE WILD TURKEY FARM—Leon P. Keiser, Superintendent, Proctor Star Route, Williamsport. Phone: Loyalsock 8-2369

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